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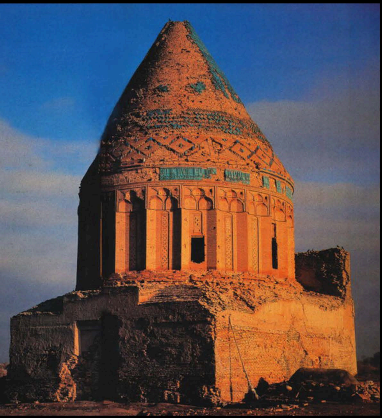

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Classical Islamic Philosophy

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Classical Islamic Philosophy

Translated from the Russian
by *H. Campbell Creighton, M. A. (Oxon)*

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Артур Сагадеев, Тауфик Ибрагим
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Introduction

The forming of classical Islamic philosophy is associated with the history of the Arab Caliphate (seventh to thirteenth centuries A.D.) which, under the aegis of the new monotheistic religion proclaimed by the Prophet Mohammed in the seventh century, had extended its power over a broad area stretching from the banks of the Indus and the Amu-Darya to the Atlantic coasts of North Africa and the Iberian Peninsula. For the first time since the days of Alexander the Great (356-323 B.C.), the Arabs united East and West, the Hellenistic Mediterranean and the Indo-Iranian world. Within the state they created there were major cultural and scientific centres of the preceding epochs. History has associated the Islamic philosophy by succession with the philosophical traditions of Hellenism. After the closing of the philosophy school in Edessa by the Emperor Zeno (A.D. 489) and that in Athens by the Emperor Justinian (A.D. 529), and in connection with the persecution of Nestorians and Monophysites by the Byzantine Church, spread of the Hellenist tradition in Asia beyond the Byzantine Empire was encouraged by the migration of Byzantine scholars to the Sassanid state. Nisibin, where a translated literature and commentaries were created in Syrian, and Hundeshapur, where scientific works from India were translated into Pehlevi, in addition to Greek and Syrian works on philosophy, became major centres of the philosophical work of Nestorians and Monophysites.

The famous Alexandrian school of physicians, scientists, and philosophers also continued to function under the Arabs. In the reign of the Caliph Omar II (A.D. 717-720), it was transferred to Antioch, and later (around 850) to Harran, a Mesopotamian city that had remained a focus of Hellenist learning from the time of Alexander the Great, and where old Greek cults had found refuge after the Christianising of the Greek world. The Syriac-speaking population of this city, Sabians, remained faithful to the antique philosophical traditions, and widely cultivated mathematics and medicine.

Arabic, which displaced the other literary languages—Syriac (Aramaic) in Syria and Iran, Greek in Syria and Egypt, Latin in the Iberian Peninsula—became an effective tool of cultural integration of the Arabs, Persians, Turks, Berbers, and other peoples of the Caliphate. As the population became Islamised, Arabic became the language of science and culture, the instrument of intercourse of educated people belonging to various confessional and ethnic groups. In that connection the so-called translation movement, in which Syriac-speaking Nestorians played a leading role, was activised. The assertion of Islam as the dominant religion was not appreciably reflected in the intellectual life of the eastern Christians, so that the philosophical activity of the Nestorians, in particular, is traceable right down to the thirteenth century in the acquainting of the Arabic-speaking world with the philosophical heritage of antiquity.

Translations of works of an ethico-didactic content from Pehlevi into Arabic predominated at first, and of works on mathematics, medicine, philosophy, which in turn were mainly translations from Sanskrit, Syriac, or Greek. Translation acquired a systematic character in the early ninth century, when, on the initiative of the Caliph al-Mamun (A.D. 813-833), the House of Wisdom *(Bayt al-hikma)* was founded in Baghdad in imitation of the old academy in Gundeshapur. A whole group of translators worked in the House of Wisdom, among whom Sahl ibn Harun, Hunayn ibn Ishaq, Ishaq ibn Hunayn, Hubaysh ibn al-Hasan, Thabit ibn Qurra, and Isa ibn Yahya were particularly famed.

Members of the Moslem civilisation were primarily interested in those elements of cultural traditions they assimilated for which they experienced a practical need. The medical works of Galen, Hippocrates, and Indian scientists, the mathematical and astronomical works of Euclid and Ptolemey, and Indian astronomical tables interested them most. The translated scientific literature also embraced other natural sciences—chemistry, botany, pharmacology, zoology, mineralogy, agriculture, agronomy, mechanics, etc.

The scholars of the Moslem world, basing themselves on the achievements of their predecessors, made their own contribution to development of the natural and exact sciences. Medicine made great progress; in it the following immortalised their names: Muhammed ibn Zakariyya ar-Razi (died in A.D. 925); Abu Ali ibn Sina (c. 980-1037), author of the famous *Canon of Medicine (Al-qanun fi-t-tibb)*; Abu-l-Qasim az-Zahrawi (tenth century), the Andalusian scholar and doctor who had a great impact on the development of mediaeval surgery; Ali ibn Isa al-Kahhal (i.e. Eye-doctor) (eleventh century), who was possibly the first to resort to anaesthesia for operations on the eye; Ibn an-Nafis (thirteenth century), who discovered the lesser (pulmonary) circulation of the blood. Moslem mathematicians and astronomers deepened and refined the ideas of their Greek and Indian teachers. In the ninth century the astronomers Abu Maashar (died in A.D. 886) and Muhammed ibn Musa al-Khawarizmi (died in the middle of the ninth century), worked in Baghdad. The latter was also the author of works on algebra, arithmetic, and mathematical geography (the term 'algebra'—*al-jabr*—occurred in the title of his mathematical treatise *Kitab al-mukhtasar fi hisab al-jabr wa-l-muqabala)*. The creation of the theory of trigonometric functions is linked with the name of the Harran mathematician and astronomer Battani (died 929). Ibn al-Haytham (956-1039) is famed in the history of optics. Biruni (973-1048), the creator of works on astronomy, mathematics, physics, mineralogy, history, geography, and ethnography, was a model of the encyclopaedic scholar (of which there were many in the Moslem East).

The creative work of Moslem scholars was distinguished by a search for practical application of theoretical constructs; an orientation to experience and observation, and in that connection broad use (and consequently invention) of all kinds of instruments and appliances; interest in quantitative methods of investigation, especially in such fields as physics, chemistry, astronomy, and geography.

The development of scientific thinking altered the scale of values, outlook, and intellectual inquiries of Moslems, whose world view could not help but go beyond the bounds of convictions held at the cultural level of the Arabians of the seventh century. That fact, together with the point that the classical science itself, assimilated by the Moslem world, had a considerably synthetic character, gave rise to a profound interest in classical philosophy.

Moslem intellectuals were acquainted with the main schools of classical philosophy, but their attention centred on Aristotle (384-322 B.C.). By the end of the ninth century A.D. all of Aristotle's main works had been translated into Arabic—either directly from the Greek or from Syriac (the bulk of the Syriac translations having been made after the establishment of Mohammedanism in the East). In the tenth century a number of Aristotle's works were retranslated with the aim of refining the sense, improving the style, and renewing the terminology. Some of them (for example, *De Sophistici Elenchi*) were translated four times. The works of his later commentators (Porphyry, Themistius, John Philoponus, Simplicius, and Olympiodorus) were drawn on for a better understanding of his philosophy.

Although some of Plato's dialogues, including *Laws, Sophist, Timaeus,* had been translated into Arabic, Aristotle's teacher enjoyed less authority than his pupil.

Translations of works going back to the Alexandrian and Athenian schools of Neoplatonism played a big role in the shaping of Islamic thought. The Moslem world was acquainted with the views of Plotinus (c. A.D. 204/205-269/270) through the so-called *Theology of Aristotle,* which was an exposition of the three last sections of his *Enneads.* Several other fragments of these same three sections were translated, and while the 'Greek elder' (*ash-shaykh al-yunani*), i.e. Plotinus, is recognised as their author, the authorship of other fragments is ascribed to Farabi. The following of the translations of Proclus (c. A.D. 410-485) have been preserved: *The Book of the Pure Good (Kitab al-khayr al-mahd),* which is a collection drawn from his *Elements of Theology,* nine of the eighteen proofs of the eternity of the world contained in the book *De alternitate mundi* (the other arguments were also known to Moslem scholars since they were expounded in their refutation compiled by John Philoponus and also translated into Arabic), *Discourse About the Proofs of the Existence of Immaterial Spiritual Forms (Maqala fi ithbat as-suwar ar-ruhaniyya)*, the authorship of which is ascribed to Alexander of Aphrodisias but which in fact is part of the *Elements of Theology*, and also separate chapters of the same book. Works of Alexander of Aphrodisias, Themistius, Olympiodorus, John Philoponus, and Nicholas of Damascus were also translated into Arabic.

The philosophical and natural science traditions of antiquity or, as they were called in Arabic, *'ulum al-awa'il* (the sciences of the ancients) were perceived by Moslem traditionalist-dogmatists as 'alien sciences' *(Al-'ulum ad-dakhila)* but in fact they were neither something entirely introduced into Islamic culture from outside, nor something foreign to it. The Syrian Nestorians, Sabians, Copts (Egyptians professing Christianity), with whom Moslems were in close and fruitful contact, were living bearers of these traditions. The influence of antique philosophy is traceable right from the beginning of the ninth century in works on grammar, in poetry, in *adabna* (a kind of popular science literature). Anecdotes and stories of the lives and doctrines of the ancient sages were spread far outside of highly educated circles.

Christian scholars, passing on the antique philosophical heritage to the Moslem world, shared with it the experience of mutual adaptation of religion and philosophy accumulated by Christianity, proofs of the legitimacy of philosophical exercises (one such proof, going back to Aristotle's lost treatise *Protrepticus,* we find in Clement of Alexandria, David the Philosopher (Dawith Anjalth), and Kindi), and so helped confirm 'sciences based on reason' (*'ulum 'aqliyya)* in a society in which 'sciences based on religious traditions' *('ulum naqliyya) predominated.* But that is insufficient to explain the flowering of philosophical tradition that began two centuries after the rise of Islam. This tradition not only never descended to the position of handmaid of theology but, on the contrary, proclaimed the idea of a society in which theology was put at the service of philosophy

(Farabi) or was banned in general by the authorities (Ibn Rushd).

That phenomenon can only be understood in its historical and sociocultural context, the characteristic features of which were the following:

—the high degree of urbanisation (in the eighth to tenth centuries A.D. Mesopotamia and Egypt exceeded the most urbanised nineteenth-century West European countries, like the Netherlands, England, and France in percentage of inhabitants of towns with more than 100,000 population), in combination with the secularism, practicism, and enterprising spirit of urban life, so clearly described in Jahiz's *Book of Misers (Kitab al-bukhala)* (ninth century);

—the wide spread of literacy, development of science, prestige of learning, extraordinary love of the written word (in Cordoba, specialists estimate, there were more books than in all contemporary Christian Europe); that created an atmosphere in which the ideal of *adab* (the equivalent of the Greek *paideia* and Latin *humanitas)* flourished. A person was considered an *adib* who combined wide-ranging secular education, crowned by knowledge of philosophy, with dedication to certain moral principles, sophisticated upbringing, and courteous behaviour;

—the mutual enrichment of cultures and the coexistence of a host of religious groups accustomed to religious tolerance, threw doubt on the exclusiveness of one's religion, and became an important factor of religious indifferentism and scepticism;

—the spread of a diversity of forms of freethinking—from treatises on the theme of the three impostors *(De tribus impostoribus)* to atheism *(zandaqa),* which became widespread among the so-called fashionable persons *(zurafa').*

The general cosmopolitan and humanistic spirit created favourable soil for inculcation of universalism, and for overcoming of religious egocentrism, distrust, and hostility to the sciences named above, pagan in origin, (and besides, received from the hands of Christians). It was shaped in the Moslem world, where, as earlier in the Hellenistic one, the consolidation of economic, commercial, and cultural ties accelerated crystallisation of the idea of the unity of mankind. Arabic wiped out the boundary in the Moslem world that divided Arab *(al-'arabi)* and non-Arab *(al-'ajami)* on the intellectual plane, just as the Hellenistic world had eliminated the same difference between Greeks and barbarians. In the theoretically egalitarian Moslem society, in which all privileges were limited to the sphere of taxation and did not affect the individual's social status, the division of people into an intellectual elite *(al-khassa)* and the masses and broad public *(al-'amma, al-jumhur)*, accepted by Platonists and Stoics, was moved to the foreground. Such a division put a deep stamp on the content of Islamic philosophy, on the one hand, and encouraged the development of an 'ideology of friendship' on the other, resembling the spiritual link of the philosophical schools of antiquity and the Italian Renaissance. The Monophysite Abu Zakariyya Yahya ibn Adi, head of the Baghdad school of Aristotelians, was a pupil of the Moslem Farabi who, in turn, was a pupil of the Nestorian Yuhanna ibn Haylan. These thinkers, together with the Jewish philosophers Bahb ibn Ya'ish and Abu-l-Khayr Dawud ibn Muzaj, who were in close contact with the Baghdad school, were linked with one another by firmer bonds than with the masses of their fellow-believers. The pictures of the intellectual life of tenth-century Baghdad painted by the *adib* and philosopher Tawhidi show how Moslems, Jews, and pagans from all ends of the Moslem world met at scholarly gatherings, accepting transethnical and transconfessional values and aims dictated by philosophy, the humanist essence of which he expressed in the expression 'Man has become a problem for man' (*ashkala-l-insan 'ala-l-insan*).

The operation of factors that prevented free development of philosophical thought was neutralised by certain features of Islam. This religion did not recognise any mediators between God and the believer, which meant that no one whatever had an exclusive right to interpret the Koran and Sunna (the collection of traditions of the words and deeds of the Prophet Mohammed). The theocratic ideal of Islam denied the possibility of there existing any religious instance together with the state resembling a church, organised clergy, or Church synods, that could take decisions binding on the whole community on disputed matters of world outlook, and fix any 'correct' teaching and on that basis consider itself to have the right to ban any ideas, to excommunicate, and to pronounce anathema. There was thus no orthodoxy in Islam (which did not prevent each school in it, as also happened in Christianity, considering its doctrine the sole correct one).

The dogmatic traditionalists, above all the jurists (*faqihs)* claimed a position in Moslem society, similar to that of the Orthodox in Christianity; they insisted on the permissibility of interpreting sacred texts only by means of sacred texts, and threw suspicion on any other forms of hermeneutics. The authority of these dogmatists was based on the civil, administrative functions performed by them, and all the champions of speculation had an inevitable hostile and contemptuous attitude toward them.

The absence of a single and generally accepted orthodoxy engendered a mode of legitimation typical of Moslem culture of even the most freethinking teachings by means of *ta'wil,* a symbolic-allegorical interpretation of the Koran and Sunna. These doctrines were also defended by other means: by *taqiyya,* a cloaking of one's true convictions and avowal in works of the predominant ideology, as was done in Shi'ism, especially among Ismailites, who were constantly persecuted by Sunnite authorities; by means of ellipsis, an omission of a structurally necessary element of the argument which, however, was readily restored by the reader from its sense; by interweaving one's own bold views in a commentary on the works of antique thinkers, as was accepted among the *falasifa,* philosophers oriented to antique models of philosophising (these philosophers strove to expound their own views in a form as complicated and difficult as possible for the uninitiated to understand); by means of an ostentatious critique of ideas in reality shared by the critic, or by ascribing theses to their own doctrine belonging to an ideological party influential at the moment (this was practised among *mutakallims,* Doctors of *kalam,* the speculative theology and philosophy of Islam).

The absence of orthodoxy left open even the question of who to consider a true *mu'min* or believer (on the answer to which hung the establishing of permissible limits of free thought). The Murjiites drew the most radical conclusions from this circumstance; they 'postponed' (hence their name) the answer to that question in regard to each individual until the Divine Judgment, since faith was so deeply hidden away in the secret recesses of the heart that only God could judge whether it existed. A person living in the lands of Islam, therefore, could fearlessly acknowledge himself an atheist, idolator, or Christian, and not disown his words until death itself, because God could all the same consider him wholly dedicated to the faith, in spite of his declaration.

Yet an approximate list of articles of faith worthy of a Moslem was spontaneously built up in Islam: the one God, his messengers and scriptures, angels, Resurrection after death, and Doomsday. Each of these articles was subjected in practice to very free interpretations which gave life to new theological and philosophical ideas and conceptions. Their recognition was obligatory for anyone who did not want to be in the position of a social outcast, since the main criterion for determining an individual's membership in a given socium was religious persuasion.

An allegorical interpretation of articles of faith with the aim of 'reconciling' them with objects of philosophical knowledge occurred in *falsafa*, while the philosophical problematic itself arose in *kalam* from a rationalist hermeneutics. *Falsafa* was a child of the 'translation movement' and *kalam* of the discussion that developed in Islam between the different religious-political groupings (Kharijites, Qadarites, Jabrites, Murjiites), and the disputes with spokesmen of non-Moslem religions (Christianity, Mazdaism). The difference between these two main trends of classical Islamic philosophy was regarded by some *mutakallims* as this, that the canon of Islam *(qanun al-Islam)*, i.e. the range of matters dictated by religion, was employed in *kalam* as the starting point of the arguments, while the canon of reason *(qanun al-'aql)* was employed in *falsafa*. From the angle of the *falasifa* themselves, *kalam* relied on dialectical arguments (in the Aristotelian sense), and *falsafa* on demonstrative (apodeictic) arguments.

But what united *kalam* and *falsafa* was the appeal to reason as the highest instance for deciding matters of world outlook. This distinguished them from the traditionalist-dogmatists on the one hand and from the mystic Sufis on the other. If *kalam* had been only a purely dogmatic science that would hardly have produced its convergence with Islamic Aristotelian philosophy in its late stage of development.

There was a coming together of both these philosophical trends with Sufiism from the twelfth century. That current in Moslem thought had extraordinarily many aspects. At its source were the 'ascetics' *(zuhhad)* and the 'gnostics' *('arifun)*. With time, the Sufis, passing from mystic-ascetic experience to reflection, began to come close to a philosophical perception of the world through a negative theology and pantheism (passage from the formula 'There is no God but Allah' to the formula 'There is nothing except Allah'). In the end two influential schools of speculative or philosophical Sufiism arose, that of Ishraqism and that of Wujudism *(wahdat al-wujud)*. At the same time some Sufis came close to Hanbalite dogmatism, having adopted a hostile position in regard to pantheistic Sufiism, while another part fell on the *falasifa* with criticism of their dry intellectualism that was becoming a barrier between God and the mystic, longing for Him.

The present volume, which covers the four-century stage of the history of classical Islamic philosophy from the early ninth century to the early thirteenth, attempts to investigate *kalam, falsafa,* and speculative Sufiism as integral trends of thought, as far as possible avoiding the individual contribution and biographical features of the creative work of their representative thinkers. In the section on *falsafa* it will be a matter chiefly of Islamic Aristotelians. In all sections the accent will be on matters of ontology and epistemology, while problems of practical reason (ethics and politics) will get minimal attention, except insofar as they are linked with problems of theoretical reason.

The reader will notice that the authors are not inclined to support certain stereotyped notions about classical Islamic philosophy in general, and about the character of its main trends in particular. The point does not concern certain false stereotypes that were formed from ideological Eurocentrism and reduced the contribution of the philosophical tradition being examined to a more or less successful commentary on the antique heritage and its transmission to mediaeval Christian Europe. The point concerns the clichés generated by methodological Eurocentrism, genetically associated with ideological Eurocentrism.

One of these clichés is the notion that there was an untiring struggle between the two main trends of classical Islamic philosophy—*kalam* and *falsafa*—in which the *mutakallim*-Ash'arites defended orthodox Islam against the *falasifa*'s heresy. That false notion is connected, on the one hand, with the transference into the history of Moslem countries of a conception of orthodoxy proper to Catholicism. On the other hand, the forming of the mistaken point of view was affected by the notion, common in all earlier histories of Islamic philosophy, of a struggle between *kalam* and *falsafa* that took shape through acquaintance with the polemical works of Ibn Rushd, whose creative work caught the special attention of European investigators.

Directly linked with this cliché is the idea of *kalam* as a purely apologetic theology and of the Ash'arite *kalam* as an 'orthodox' reaction to Mu'tazilite *kalam,* and also the stereotype of the atomistic occasionalism of the *Mutakallims,* which was taken as an expression of the specific spirit of Islamic culture and of the mentality of the people that created it.

The false stereotype includes the idea of the Islamic Aristotelians as thinkers of a 'dual citizenship', who were only concerned to try and reconcile the Moslem and Hellenic components of their consciousness. The philosophical trend created by them is represented as rising and taking shape as a result of the Moslem world's uncritical assimilation of the philosophical heritage of antiquity (including Neoplatonist ideas in Aristotelianism drawn from the pseudo-Aristotelian *Theology).* This trend allegedly developed toward a self-purging of the admixtures appearing in it in that way.

Finally, these clichés include the notion of Sufism as sheer mysticism. This false notion ignores the diverse character of Sufiism and underestimates the significance of the speculative philosophical trend in it. It mistakenly characterises Ghazali as a thinker who allegedly united Sufiism and *kalam* and so ensured it the status of an orthodox doctrine.

We consider it necessary to make that reservation since the purpose of our book—to provide a textbook for those who have decided to study classical Islamic philosophy—does not allow us to lard our exposition with references to the point of view of other scholars, or to preface our work with an analytical survey of the appropriate sources and literature on the history of philosophy.

SECTION I

Kalam: Philosophy in a Context of Theology

I

General Description. The Main Schools

Kalam, or *ilm al-kalam* (Arab. *kalam*-speech, word, argument) is historically the first major trend in classical Islamic thought. It is a speculative discipline cultivated mainly in Mu'tazilite and Ash'arite circles. In the works of *mutakallims* (spokesmen of *kalam)* themselves, and of other mediaeval writers, and also in modern Islamic studies and works on the history of philosophy, various versions of the etymology of the name of this discipline are encountered, and at the same time differences in its definition. We shall therefore begin acquaintance with the *mutakallims*' teaching with a discussion of the meaning of the term *'kalam'* and a description of the discipline signified by it.

RE: THE TERM *'KALAM'*

The fullest list of propositions about the origin of the term *'kalam'* was given by Taftazani (d. 1390) in his *Sharh al-'Aqa'id an-nasafiyya (A Commentary on the Creed of Najm al-Din al-Nasafi):*

(1) 'the subject of [the] investigations was their saying "The discourse (*al-kalam*) about such-and-such" ';

(2) 'the problem of [the meaning of the term] Speech [predicated of Allah] was the most celebrated of its investigations, the most strongly disputed, and the subject of much controversy ...';

(3) 'it imparts ability in speech in verifying legal matters and in compelling adversaries to submit just as logic *(al-mantiq)* imparts ability in philosophy';

(4) 'it is the first of the sciences which can be known and learned by speech only, so this term [speech] was

applied to this science, and then it was exclusively used for it and not applied to any other science for the sake of distinction';

(5) 'it can be verified only by discussion and interchange of speech from two sides, whereas others are sometimes verified by meditation and the perusal of books';

(6) 'it is the most disputatious and controversial of the sciences, so speech was greatly needed for conversing with those of opposite view and refuting them';

(7) 'it has become, so to speak, "the speech" *(al-kalam)* to the exclusion of any other sciences, just as it is said of the stronger of two discources, "This is 'the discourse'" ';

(8) 'because it is based on decisive proofs ... most of which are supported by proofs to be believed on authority, it is consequently the strongest in its influence on and penetration into the heart. So it is called *al-kalam* as though derived from *al-kalm*, that is "the wound" ';[1]

Only the second explanation in this list is the one most acceptable for a number of students. It is found as the first of two possible explanations in the work of the earlier doxographer and *mutakallim* Shahrastani (d. 1153), *Book of Religious and Philosophical Sects (Kitab al-milal wa-n-nihal)*.[2] The problem of eternity or of the creation in time of the Koran was the focus of attention of *mutakallims* and theologians of the first half of the ninth century. Nevertheless, the link of the term *'kalam'* with this problem looks improbable. For no one other than the Mu'tazilite Jahiz (died 868), in whose works the words *'kalam'* and *'mutakallim'* are met for very nearly the first time as technical terms, wrote of the necessity for *mutakallims* to unite the *kalam* of religion *(kalam ad-din)* with the *kalam* of philosophy *(kalam al-falsafa);* he, too, mentioned *mutakallims* among Christians *(mutakallimu an-nasara)*.[3] Such a use of the two terms would not have been possible at the time when discussion developed around the problem of the creativity of the Koran, if they had owed their origin precisely to it.

According to another version, cited by Shahrastani, *kalam* corresponds to the logic of philosophers, and logic *(mantiq)* and *kalam* are synonyms.[4] Certain *kalam* scholars put forward a similar version, deriving *kalam* from the Greek *dialex technē* of Plato or the *dialexis* of the Church Fathers. From that angle it was a definite technique whose distinguishing feature was a dialogue with a real or fictitious opponent usually expressed in formulas of the type of *'in qultum—qulna'* ('if you say, we say'), which corresponded to the formula *'ei de phate—apokrinoumetha'* in Christian literature.

Some workers reduce the term *'kalam'* to the Greek word *'logos'*, for which they cite the fact that in Arabic translations from the Greek, the expression *'al-kalam at-tabi'i'* (reasoning on problems of physics), for example, corresponded to 'peri physes logoi', *'al-mutakallimun fi-t-tabi'iyyat'* ('those who argue about problems of physics') to *'physiologoi'*, *'ashab al-kalam al-ilahi'* ('those who argue about the divine') to *'theologoi'*, and so on. But whereas some Islamic scholars linked *kalam* with *logos* only in the expression *theo-logy,* others linked it only in the sense of argument. As some authors suggest *kalam* comes from the Greek *theologia* through the Syriac *mamlut alahuta* or *mamla alahiyya.*

The term *'kalam'* has, rather, an endogenous origin. It originally signified theoretical, rational reasoning in general, or philosophising. The subject-matter of this reasoning primarily concerned theological questions of some kind. In that sense *kalam* is a synonym of teaching or doctrine, which corresponds to Taftazani's first explanation. Almost all the other explanations point to the fact that *kalam* originally had a predominantly oral character, developed mainly in disputes, above all between *mutakallims* themselves. Later it began to be used in the main as the name of the speculative discipline which the Mu'tazilites, and later the Ash'arites, developed.

Two main tendencies are met when a substantial description of this discipline is being defined. The first consists in reducing it to a difinite technique—to a dialogistic style of exposition, the art of compiling questions and answers, the procedure of leading an opponent into contradictions, *reductio ad absurdum,* etc. Within the second tendency it is understood in a broader sense and identified with theology. True, it is often specified here that it is not a matter of theology like the Christian, in which the illuminative function, the striving of reason, enlightened by faith, to penetrate the mystery of revelation, plays a paramount role. *Kalam* is only a protective apologetic, more a destructive discipline than a constructive one. And although it is sometimes characterised as the scholastic theology of Islam, it is usually depicted more as scholasticism than simply as theology.

In reality *kalam* is not reducible either to polemic or to theology. The theological problematic occupies only part of the investigatory field of *mutakallims,* and represents 'major problems of *kalam*' *(jalil al-kalam)*. Themes of an ontological and natural philosophical character, known as 'nice problems of *kalam*' *(daqiq al-kalam)* have a significant, and frequently predominant place in the creative work of *mutakallims.* The epistemological principles (anti-authoritarianism, antifideism, and antimysticism) characteristic of *kalam* also divide it from theology. *Mutakallims,* as we shall see below, proclaimed the unconditional authority of reason in the solution of problems of world outlook *(Weltanschauung)* including theological ones. This rationalist orientation once more convinces one of the unsoundness of the qualification of *mutakallims* sometimes met in the literature as spokesmen of Moslem orthodoxy—a concept inapplicable to the real religious life of Islam. It also explains the fact that *kalam* was inacceptable for the majority of *faqihs* (teachers of *fiqh,* or Moslem jurisprudence), dogmatic theologians (especially Hanbalites), Sufis (with their characteristic mysticism, and cultivation of ecstatic experience), and Shiites (with their faith in the infallibility of imams).

Kalam arose and developed originally during the discussions that developed in Islam with the appearance of various religious-political groupings (Kharijites, Murjiites, Qadarites, and Jabrites), and also during disputes with spokesmen of non-Moslem creeds (Mazdaism, Christianity). A method of reasoning inherent in *kalam* was developed in these disputes, a method for which the following were characteristic: appeal to the symbolical-allegorical interpretation of the Koran; exclusion from argumentation of any theses of references to any authorities whatsoever, except reason, as the highest instance; broad application of the ploy of *ilzam* (Arabic for 'coercion', a variety of *argumentum ad hominem),* on the basis of which conclusions (usually absurd) logically deduced from an opponent's premisses were attributed to him. An initial problematic also took shape: the unity of God and the relation of his essence and attributes; the eternity of the Koran or its originativeness or createdness in time; the determinativeness of human deeds; the qualification of a person as a member of the Moslem community; the qualities necessary for a leader of Moslems (caliph, imam), etc. These questions, directly linked with the dogma of Islam, formed the 'major problems of *kalam*', from which the 'fine' ones about motion and rest, substance and accidence, atom and continuum, etc., were distinguished.

The method and problematic proper to *kalam* are first met, seemingly, in the work of Jad ibn Dirham (killed in A.D. 742/3). His is the idea of the impossibility of ascribing anthropomorphic attributes to God, of the creation of the Koran in time, and (according to some sources) of the freedom of the human will. The Jahmite school, famous for its consistent fatalism of a pantheistic type, is linked with Jad's disciple Jahm ibn Safwan (killed in A.D. 745). Jahmism, leading spokesmen of which were Dirar ibn Amr (died A.D. 815), Bishr al-Marisi (died A.D. 833), and his disciple al-Husayn an-Najjar, quickly gave way to Mu'tazilism and as it were dissolved into it. Jahmites and Mu'tazilites held identical views on the question of God and his attributes, in particular on the createdness of the Koran, which served as grounds for some opponents of *kalam* and doxographers not to differentiate the two schools, although their spokesmen held diametrically opposite positions on the question of free will.

MU'TAZILITES

Mu'tazilism (Arab. *mu'tazila* that which is withdrawn or detached) was the first major school of *kalam*. The term 'Mu'tazilites' originally meant those who held a neutral position in the period of the first intra-Moslem civil war, in the battle of al-Jamal in A.D. 556 and of Siffin in A.D. 657. The Mu'tazilites themselves associated their title with their exclusion from the circle of al-Hasan al-Basri (died 728), a major figure in the religious life of Basra at that time, and his disciples Wasil ibn Ata (died 748) and Amr ibn Ubayd (died 761), the founders of Mu‘tazilism.

The Mu‘tazilites, ideologically associated with the educated circles of the middle strata of the urban population, came forward as one of the religious-political parties opposed to the Umayyads. Sympathy with the Shiites largely explained their negative attitude to the Abbasids. They supported the Shiite claimant to the throne of the Caliphs, An-Nafs az-Zakiyya, and took part in the uprising of A.D. 762 against the Abbasid Caliph Mansur. Under Harun ar-Rashid (reigned A.D. 786-802), and especially in the years of the rise of the Barmakid viziers, and later under Mamum and his two immediate successors—Mutasim and Wasiq (reigned in A.D. 813-847), the Mu‘tazilites enjoyed marked influence. Some of them held responsible posts in the state. Their activity, like that of the other rationalist thinkers, was encouraged by the state. The thesis common to Mu‘tazilites and Jahmites about the created character of the Koran was treated as a criterion of theologians' loyalty to the existing regime. But under Mutawakkil (reigned A.D. 847-881) the Mu‘tazilites were persecuted and their ideological positions in the state, especially in the capital, were strongly undermined, although they retained a certain influence outside Iraq. Mu‘tazilites again appeared in the political arena in the reign of Buwayhids (A.D. 945-1055), under whom the Mu‘tazilite school of Abd al-Jabbar (died 1024/5) flourished, who held the post (through the intercession of the Vizier as-Sahib ibn Abbad) of supreme judge of the city of Fes (near present-day Tehran). Their ideas found reflection in the views of Zaidites and to a less extent of Imamite Shiites. In the twelfth and thirteenth centuries Mu‘tazilism flourished in Khorezm (Khwarism), but its influence disappeared in fact in Sunnite circles in Iran and other eastern regions of the Moslem world in connection with the Mongol conquests.

During the whole history of Mu‘tazilism there was a host of rival groupings in it associated with the names of certain thinkers. The main schools in the ninth and tenth centuries were the Basra and Baghdad ones; in addition to the founders of Mu‘tazilism (and al-Hasan al-Basri himself, whom Mu'tazilites considered among their teachers) the prominent representatives of the former were Muammar ibn Abbad, Allaf (died A.D. 840), Nazzam (died 835/6), Jahiz (died 868), Abu-Ali al-Jubba'i (died 915), and his son Abu-Hashim (died 933). Abd al-Jabbar and his successors were close to the Basraites. Thumama ibn al-Ashras (died c. A.D. 828), Murdar (died 840), Ahmad ibn abu Duad (died 854), Khayyat and Kabi (died 929-931) belonged to the Baghdad school founded by Bishr ibn al-Mutamir (died 825). The discussions between the two schools were primarily around the 'niceties of *kalam*'. An idea of the subject-matter and character of these discussions is given by one of the numerous books that have come down to us from the Mu'tazilites: *Problems of the Disagreements between the Basra and Baghdad Schools (Al-Masa'il fi-l-khilaf bayna-l-basriyyn wa-l-baghdadiyyn)* of Abu-Rashid an-Nisaburi (d. 1024), a pupil of Abd al-Jaabar.

The following five basic propositions (*'usul*) served as criteria of identification common for all Mu'tazilites.

1. Justice (*'adl*): divine justice presupposes man's freedom in his actions, and God's capacity to create only the 'best' *(al-aslah)*.

2. Monotheism *(tawhid)*: consistent monotheism denies not only polytheism and anthropomorphism, but also the reality and eternity of the divine attributes as certain essences or hypostases distinct from the divine essence. Mu'tazilites differentiated attributes of essence (knowledge, power, and life, which were considered identical with the divine essence, and in that sense eternal) and attributes of action (will, hearing, speech, which were considered as created, arising in time, changeable, and therefore distinct from the divine essence). Hence the thesis of the created character of the Koran as the word of God.

3. Promise and threat *(al-wa'd wa-l-wa'id)*: God is obliged to carry out his promise and threat, if he promised the obedient paradise and threatened sinners with hell; therefore neither the intercession *(shafa'a)* of the Prophet nor even the mercy of the All-Highest could alter the character of the requittal for the acts committed by a person.

4. The intermediate state *(al-manzila bayna-l-manzi-*

latayn): the Moslem who committed heinous sins *(kabira),* fell out of the number of the believers (in opposition to the opinion of the liberal Murjiites, who qualified him as believing), but did not become an infidel (as the rigorous Kharijites taught), being in an intermediate state between them. Wasil ibn Ata called such a Moslem a sinner *(fasiq)* while al-Hasan al-Basri qualified him as a hypocrite (*munafiq*). This disagreement, according to Mu'tazilite tradition, was the cause of the withdrawal of the first Mu'tazilites from the circle of their teacher. The sinner, in their opinion, retained all his rights as a member of the Moslem community (security of life and property, the right to inherit from other Moslems, and so on), but nevertheless could not be a Caliph or an imam. In the other world the sinner (if he had not repented before death) was doomed to eternal hell-fire together with unbelievers, but his punishment would be rather lighter than the latters'. The proposition of the intermediate state was sometimes designated by the phrase 'names and judgments' *(al-asma' wa-l-ahkam)* since the appellation of the 'impious' person (as believer or non-believer, or sinner) also related to his qualification from the standpoint of his status in this world and the next.

5. Enjoining of the approved and interdiction of the censured (*al-amr bi-l-ma'ruf wa-n-nahi 'an al-munkar):* this proposition, common to Mu'tazilites, Harijites, and Shi'ites, obliged a Moslem to promote the triumph of good by all means (not excluding violent ones, e.g. by the sword) and to fight against the dominance of evil, which Mu'tazilites usually associated with political matters. Under that motto Mu'tazilites took part, in particular, in the uprising of A.D. 762.

The appellation of Mu'tazilites as *'adliyyun, 'adliyya* (just), and ahl'adl (defenders of justice) is connected with the first of these five tenets. Their other more common appellation *ahl al-adl wa-t-tawhid* (defenders of justice ~~and mon~~otheism) reflects the first two principles. Mu'tazilites' teaching about freedom of the human will give their opponents grounds for counting them as Qadarites (Arab.—*qadariyya),* although Mu'tazilites themselves rejected this name, which had a negative connotation in the light of the *hadith:* 'Qadarites are the magi of this [Moslem] community'. A dualism, the recognition of two creators, was noted in the Mu'tazilites' declaration of man as the creator of his actions, which argued *inter alia* the impossibility of God's being the creator of evil. Mu'tazilites considered that the epithet 'qadarite' was more suitable for their opponents, the fatalists, who taught about *qadar,* or predestination. The Mu'tazilites called these opponents Jabrites (Arab. *jabriyya, mujbira,* from *jabr*—compulsion), since they considered God the sole real actor or creator, from which it followed that man was compelled to his actions, and did not perform them freely. Later the term Jabrites was employed to designate fatalists (predestinarians), in opposition to libertarians (Qadarites).

The golden age in the history of *kalam* is linked with the upsurge of Mu'tazilism in the first half of the ninth century. As regards its flourishing, the Ash'arite Shahrastani wrote that it began under the Abbasid Caliphs Harun, Mamun, Mutasim, Wasiq, and Mutawakkil, and finished with as-Sahib ibn Abbad and the group of Dailamites.[5] In the conditions of the persecution of Mu'tazilism, which had already begun under Mutawakkil, and of attacks on *kalam* in general, an attempt was made by Abu-l-Hasan al-Ashari (d. 935), a pupil of the Mu'tazilite al-Jubbai, and the founder of a new school of *kalam*—Ash'arism, to defend it by way of a compromise (sometimes formal) with the traditionalist dogmatists.

ASH'ARITES

The leading representatives of Ash'arism (Arab. *asha'ira, ash'ariyya*) in the tenth to twelfth centuries were Baqillani (d. 1013), Ibn Furak (d. 1015), Abu Ishaq al-Isfarayini (d. 1027), Abd al-Qadir al-Baghadadi (d. 1037), Juwayni (d. 1085), Shahrastani (d. 1153), and Fakhr ad-Din ar-Razi (d. 1210). Like the Mu'tazilites, the Ash'arites differed among themselves in the interpretation not only of the 'niceties' of *kalam,* but also of its 'major problems'. And although they did not formulate a distinct system of principles that could serve as a criterion of belonging to the Ash'arite school, they were united by a common orientation in the solution of a number of theological problems.

On the matter of the divine attributes Ash'arites recognised such attributes of the essence of God as knowledge, power, life, will, speech, vision, and hearing. They considered them eternal, not distinguished from the divine essence and not identified with it. Following the Mu'tazilites, they denied the eternity of the attributes of action (creating, feeding, etc.), considering them as arising in time.

While not adopting the realistic position of the attributists *(sifatiyya,* from *sifa* attribute), who represented the majority of theologians, and who affirmed the real existence of attributes as things, in contrast to the divine essence, nor the nominalist approach of the Mu'tazilite-antiattributists (*Mu'attila,* from *ta'til* lacking), inclined to declare the attributes simply names designating the divine essence, some Ash'arites (Baqillani, Juwayni, and Fakhr-ad-Din ar-Razi) developed conceptualist views of their own. Instead of the traditional term 'attribute' *(sifa)* they (like the Mu'tazilite Abu Hashim al-Jubbai before them), employed the term 'modus' *(hal,* plural *ahwal)*. They characterised modi as neither existent nor nonexistent, a formula that had the merit of not contradicting the logical law of the excluded middle, because it was a matter, in its first part, of existence outside mind, and in the second of verbal existence, which subsumed a third type of existence, existence in mind.

The Ash'arite doctrine of the eternal nature of the Koran was linked with recognition of the eternity of the attribute of speech. Within this doctrine Ash'arites distinguished sensual, verbally expressed speech or discourse *(kalam hissi, kalam lafzi)* and internal speech *(kalam nafsi)*. In recognising the eternal nature of the Koran in respect of sense or meaning, they taught, along with that, its createdness in respect of its verbal expression and arrangement. Furthermore, some Ash'arites, in particular Juwayni, suggested that the Koran not only arose in time in this second respect, but was also not obligatorily divine. God transmitted only the sense of the revelation to the Archangel Gabriel, which he in turn passed to the Prophet; it followed from this that the verbal form and arrangement of the Koran may belong to Mohammed himself.[6]

Like Mu'tazilites, Ash'arites denied anthropomorphic ideas of God. But whereas the Mu'tazilites rejected the idea of the anthropomorphists *(mushabbiha,* literally 'resembling') about the possibility of beholding God, based on the verse of the Koran about the Day of Judgment:

> Some faces, that Day
> Will beam (in brightness
> And beauty);—
> Looking towards their Lord [7]

the Ash'arites recognised such a possibility. At the same time they stressed that it was not a matter of sensual vision, but of a kind of knowledge.[8]

Denial of the Mu'tazilites' teaching about man as the creator of his own actions also united Ash'arites. The epithet 'creator', they considered, was only applicable in relation to God. When resolving the problem of moral responsibility, Ash'ari and his followers put forward the conception of *kasb* (performance or acquisition) according to which actions are created by God, but performed or acquired by man, who possesses free choice.

In the development of these theological questions of *kalam,* and others, Ash'arites represented their doctrine as something intermediate, a *via media,* between the positions of Mu'tazilites and the doctrine of the traditionalists. They often demonstratively opposed themselves to Mu'tazilites, reached a certain compromise with the opponents of Mu'tazilism, especially with the Hanbalites. But in fact they continued the rationalist line of Mu'tazilism. There is therefore no hard and fast line between the two schools of *kalam,* which is shown in particular by the following: Ash'ari himself came from a milieu of Mu'tazilites, and the eminent Mu'tazilite Abd al-Jabbar initially joined the Ash'arites. The opponents of *kalam* among conservative theologians saw in Ash'arism a continuation of Mu'tazilism, and some heresiographers even counted Ash'arites members of one of the Mu'tazilite groups. The hostility to Mu'tazilite rationalism of traditionalist dogmatists was extended to Ash'arite *kalam* as well.

A new stage in the history of *kalam* began from the thirteenth century, viz., the rapprochement of Mutakallims with the *falasifas,* above all the Ibn-Sina's school.

This rapprochement had been prepared for the former by the work of Shahrastani and Fakhr ad-Din ar-Razi, and for the latter by Nasir ad-Din at-Tusi (d. 1274). As a result, according to Ibn Khaldun, problems of *kalam* and problems of *falsafa* merged among the last *mutakallims* so that these sciences became indistinguishable.[9] The new stage in the development of *kalam,* which received the title of *kalam* of the last, or late *kalam (kalam al-muta'khkhirin),* the *via nova,* was presented in the works of Baydawi (d. 1286), Isfahani (d. 1348/9), Iji (d. 1355), Taftazani (d. 1390), Jurjani (d. 1413), and others.

Ash'arism mainly found supporters in Iraq, Syria, and Egypt. In Maverannakhr[10], after the tenth century, there was a spread of the school of Maturidites—followers of Abu Mansur al Maturidi (d. 944), whose doctrine differed very little from the teaching of the Ash'arites.

In the context of the theological problematic, the *mutakallims* resolved a number of fundamental problems characteristic of mediaeval philosophy, including questions of the relation of faith and reason, and of God and the world. A leading place in the 'niceties' of *kalam* was taken by the question of the structure of physical bodies, 'indivisibles' and the continuum. We shall touch on these matters below in the appropriate chapters, and in the exposition will turn to classic *kalam,* the *via antiqua,* when it was not yet united with the Islamic Aristotelian philosophy.

NOTES TO CHAPTER 1

[1] E.E. Elder. *A Commentary on the Creed of Islam. Sa'd al-Din al-Taftazani on the Creed of Najm al-Din al-Nasafi* (Columbia U.P., New York, 1950), pp. 7-8.

[2] Ash-Shahrastani. *Al-Milal wa-n-nihal* (Mu'assasat al-Halabi wa-shurakah, Cairo, 1968), Vol. 1, p. 29.

[3] Al-Jahiz. *Kitab al-hayawan* (Matba'at al-Babi al-Halabi, Cairo, 1938-1945), Vol. 2, p 134; *idem.* Rasa'il. *On the margins of 'Al-Kamil' of al-Mubarrad* (Cairo, 1324 A.H.), Vol. 2, p 174.

[4] Ash-Shahrastani. *Op. cit.,* p. 29.

[5] *Ibid.,* p 30.

[6] Al-Juwayni. *Al-Irshad* (Maktabat al-Khanji, Cairo, 1950), p 135; Ibn Furak. *Mujarrad maqalat ash-shaykh Abi-l-Hasan al-Ash'ari* (Dar al-mashriq, Beirut, 1987), p 165.

[7] *The Holy Qu-ran.* Text, Translation and Commentary by Abdul-

lah Yusuf Ali, presented to The Muslim World League (Mecca, 1965), p 75, verses 22, 23.

[8] See: Ash-Shahrastani. *Op. cit.*, Vol. 1, p 100.

[9] See: Ibn Khaldun. *Al-Muqaddima* (Al-Matba'a ash-sharafiyya, 1327 A.H.), (Beyrouth, 1967), p 520.

[10] Maverannakhr is the mediaeval Arab name for the land between the Amu-Darya and Syr-Darya, containing Samarkand and Bokhara.

2

Faith and Reason

Given predominance of a religious ideology, one of the central points of the confrontation of world outlooks is the question of the relation of faith and reason, of religion (or theology) and philosophy. For the teachers of *kalam* that was posed as the question of the relation of reason (*'aql*) and tradition (*naql*, *sama*), by which was implied, above all, the Koran, the Sunna (the digest of *hadith* or traditions of sayings and deeds of Mohammed), and the opinions of religious authorities. The *mutakallims* asserted the priority of reason over tradition, denied *taqlid* (imitation; unreflecting following of religious and other authorities) and insisted on doubt as a preliminary step in the adoption of any views and doctrines.

Fideists were hostile to rationalism, antiauthoritarianism, and the criticism of *kalam.* The representatives of the radical wing of the traditionalist-fideist camp were the people of tradition (*ashab al-hadith*)—defenders of absolute reliance on the authority of the Koran and sunna (in contradistinction to the *ashab ar-ra'i,* defenders of rationalist investigation of religious-legal questions). The traditionalists were also joined later by members of two schools of Moslem law—the Hanbalites (followers of Ahmad ibn Hanbal (d. 855), and the Zahirites (literalists, supporters of Dawud al-Isfahani (d. 883). The opposition to *kalam* was strong, although to a lesser degree among members of the other schools of Sunnite law—the Malikites, Shafi'ites, and Hanafites. The Hanbalites Barbahari (d. 941), Ibn al-Jawzi (d. 1200), Maqdisi (d. 1223), and Ibn Taymiyya (d. 1328) were active in the struggle against the rationalism of *kalam;* so were the Zahirite Ibn Hazm (d. 1063), the Malikite Ibn Abd al-Barr (d. 1071), and the Shafi'ites Busti (d. 1191) and Zahabi (d. 1348).

The hostile attitude to *kalam* found embodiment in dicta drawn from the greatest religious authorities, including the founders of the various schools of *fiqh* (law):

> 'the teacher of *kalam* is an apostate from the faith *(zanadiqa)'* (Ibn Hanbal);
> 'my judgement with respect to the partisans of kalam that they be smitten with fresh leafless palm branches, that they be paraded among the communities and tribes, and that it be proclaimed: "this is the punishment of him who has deserted the Book and the Sunna, and taken up kalam" ' (Ash-Shafii);
> 'discussion (kalam) concerning religious matters, I hate' (Malik ibn Anas);
> 'He who seeks religious knowledge through kalam, becomes an apostate *(zindiq)"* (Abu Yusuf), and so on.[1]

The *mutakallims* were compelled to answer such accusations, and to defend the right of reason to treat any philosophical and theological matter.

LEGALISATION OF PHILOSOPHICAL DISCOURSE

One of the first attempts to defend the rationalist spirit of *kalam* against the attacks of Hanbalites and other traditionalists was made by Ash'ari in his treatise 'A Vindication of the Science of *Kalam' (Istihsan al-khwad fi 'ilm al-kalam)*. In that work the head of the Ash'arite school brought out the unsoundness of the position of

> a certain group of men [who] have made ignorance of their capital; finding reasoning and inquiry into religious belief too burdensome, they incline towards the easy way of service sectarianism.
>
> They calumniate him who scrutinises the basic dogmas of religion and accuse him of deviation. It is innovation *(bid'a)* and deviation *(dalala)* they claim, to engage in kalam about motion and rest, body and accident, accidental modes and states *(akwan)* the atom and the leap and the attributes of the Creator.[2]

Al-Ash'ari first stated the basic objections of these anti-rationalist opponents, and then passed to an examination and refutation of them.

The essence of the opponents' objections consisted in the following. The Prophet Mohammed had given an exhaustive explanation of all the matters that appertained to religion, but did not touch on ones, like those mentioned above; these must therefore be qualified as things not necessary to religion, and concern with them as innovation *(bid'a)* and error. Furthermore, the Companions *(Sahaba)* of the Prophet did not occupy themselves with such themes, so that people should follow their example because, if such studies could do religion any good, the Companions would not have ignored them.

Ash'ari made his vindication in three directions. First, he undertook in a typical polemical, dialectical manner to neutralise his opponents' argument. The reproach addressed to *mutakallims,* he remarked, could be redirected to the opponents, for the Prophet had not also said that he who concerned himself with such themes should be considered a lost sheep. So, by the opponents' logic, they themselves were misguided innovators, since they argued about things about which the Prophet had not said anything.

Furthermore, Ash'ari pointed out, the problematic that *mutakallims* concerned themselves with was well known to the Prophet and his companions; it existed in the Koran and in the Sunna, although only in general form, and not in detail. Thus the questions of motion and rest in their connection with monotheism were touched on where the Koran spoke of the prophet Abraham, who, observing the movement of the stars, and their rising and setting, realised that they could not be gods, because God does not move in space.[3] In the same way, the problem of the divisibility of bodies was touched on in the verse of the Koran

> ... and of all things
> Have we taken account
> In a clear Book
> (of evidence);[4]

and account was taken only to the finite, i.e. the division of bodies could not be continued to infinity; which witnessed to the existence of the 'indivisible particle', the atom. Ash'ari drew a host of examples from the Koran and Sunna, in which he discovered not only themes similar to the problematic of *kalam* but also certain features of the polemical-dialectical technique employed by *mutakallims.*

Finally, Ash'ari pointed out a number of facts that witnessed that the Companions, and after them the greatest religious authorities, had discussed various religious-legal matters that were not known at the time of the Prophet. And these matters were no less innovations than those discussed by *mutakallims*. The position of Ibn Hanbal himself could be counted an innovation—both when he refrained from a positive answer to the question of created character of the Koran, and when he accused the defenders of its created character of lack of faith—for the Prophet had not said 'if this matter is raised, refrain from an answer', and had not said 'count as misguided and innovators those who affirm the created character of the Koran!'.

An orientation characteristic of the Doctors of *kalam* found reflection in the *Vindication,*—in the struggle to legitimise their science, and theoretical meditation in general, they converted theology into its servant. They found arguments in the sacred texts that could be cited in defence of rational investigation and speculation *(nazar)*. *Mutakallims* went even further, declaring speculation not only the right of every Moslem but also his duty. In the same spirit they endeavoured to utilise theology to their own ends. Religion, they said, was impossible without knowledge of God; the existence of God was not something given or obvious, it could only be ascertained by means of speculation, from which it followed that speculation was a universal obligation. The Ash'arite Juwayni argued as follows: if anyone asks how, starting from religion *(shar')*, we can demonstrate the obligatory character of speculation, we answer that the general agreement *(ijma')* of Moslems is proof that knowledge of God is obligatory and inevitable. But once this general agreement (consensus) was established, and it was established by reason that the obtaining of acquired knowledge depended on correct speculation, the absolute necessity of something entails the necessity of that without which it cannot be achieved.[5]

The activity of *mutakallims* was directed to legitimising not only their set of techniques (rational methods of investigation) but also the field of investigation itself. Their heuristic interest embraced both predominantly theological subjects *(jalil al-kalam)* but also a properly ontological and especially natural-philosophical problematic, the so-called 'niceties of *kalam*'. Mu'tazilites, according to one of them, Jahiz, wanted to know everything.[6] We find that idea in one of the volumes of his remarkable work *The Book of Animals,* which was an entertaining encyclopaedic work on zoology. Other treatises of natural science—*The Book of Minerals, Book of Mathematics,* etc.—also came from his pen. The teacher of this *mutakallim* Mu'tazilite, the eminent Nazzam, was famous for his experiments on animals (which are related, in particular, in the same *Book of Animals).* A contemporary of Nazzam, Allaf, was the author of such scientific works as the *Book of the Forms of Motion (Kitab al-harakat), Book of Dimensions, Colour, and the Constitution of Man (Kitab fi tul al-insan wa-lawnuh wa-ta'lifih),* and the *Book of Sounds (Kitab fi-s-sawt mahuwa).* This interest in natural science was characteristic of Mu'tazilites as well in the following period. Thus Kabi, who is usually called the 'Alexander Humboldt of the Mu'tazilite school', occupied himself with astronomy, medicine, geography, physics, and mathematics. Jubbai and Abd al-Jabbar wrote treatises on mechanics, physics, and chemistry. Works on similar themes also figure in the lists of works of *mutakallim* Ash'arites.

In the Mu'tazilite stage of the development of *kalam,* in the age of its flowering, Jahiz wrote, *mutakallims* could still allow themselves to prefer experiments on dogs and cockerels to preaching and reading the Koran, to be carried away more by a theory of interpenetration of bodies *(mudakhala)* than Koranic studies, more by a doctrine of leap *(tafra)* than by jurisprudence.[7] At that time Doctors of *kalam* openly pretended, as well, to competence in disciplines cultivated in *falsafa.* The true *mutakallim,* Jahiz stressed, was he who understood matters of religion *(kalam ad-din)* just as well as problems of *falsafa (kalam al-falasifa)*; he considered a scientist one who combined knowledge of both.[8]

At the next stage of the development of *kalam,* in the conditions of confrontation with dogmatist theologians who were hostile not only to *falsafa* but also to *kalam, mutakallims* were compelled to dissociate themselves from the *falasifa,* and zealously concerned themselves with legitimising *kalam,* including its 'niceties', which they began to depict as implied by the theological problematic of *kalam.*

The subject-matter of *kalam,* the *mutakallims* said, primarily comprised questions of the essence of God and his attributes. But it was necessary, when studying these matters, to go into problems of a natural-philosophical character. We saw above that Ash'ari pointed out that discussion of the problem of divine knowledge led surely to the atomistic problematic. *Mutakallims* showed, in the same spirit, for example, that studies in optics were necessary in order to answer whether it was possible to behold Allah.

Later, when *mutakallims* took a line of rapprochement with *falsafa* and of integrating the philosophical disciplines traditional to the Peripatetics into *kalam,* they began to justify their occupation with *falsafa* by the need for acquaintance with it in order to refute its tenets that were incompatible with Islam. According to Taftazani, Moslems tried, when philosophical works were translated into Arabic and they began to study them, to refute the philosophers *(falasifa)* where they contradicted the *shari'at,* and in that way introduced much into *kalam* from philosophy *(falsafa)* in order, by clarifying its essence, to show up its unsoundness. The point here was, moreover, he said, that they included the greater part of Peripatetic physics and metaphysics in *kalam,* and occupied themselves with mathematics, so that *kalam* became almost indistinguishable from philosophy *(falsafa).*[9] *Mutakallims* began to assert that the problems of logic, mathematics, and natural philosophy interested them only insofar as study of nature led to reliable knowledge about what it was necessary to believe.[10] But it should not be feared that *kalam* also included subjects that had no relation to theological matters, for they (Taftazani claimed) yielded nothing but good; they did not contradict religious dogmas and were most suitable for *kalam.*[11]

Mutakallims, who were accused by dogmatist theologians of impious innovations and of apostasy, and whom the dogmatists intended 'to be smitten and paraded among the communites and tribes', put into motion the whole arsenal of polemical and dialectical means to defend their science. The Doctors of *kalam* were real masters of dialectic as the art of dispute. The description of Jahiz as a man who knew how to make the small big and the big small, and who could prove the thesis and its opposite,[12] is applicable to almost all known *mutakallims.*

In developing the precepts of the author of *A Vindication of the Science of Kalam,* Ash'arites undertook to 'defuse' the anti-*kalam* statements of the religious authorities. They began to demonstrate that the Pious Ancestors *(Salaf)* and imams had in mind, when opposing *kalam,* not *kalam* in general but certain versions of it; the *kalam* of the Mu'tazilites, the *kalam* of religious fanatics, the *kalam* cultivated for the sake of 'ambition and worldly goods', and so on. What devices Ash'arites were forced to resort to can be judged from their attempt to neutralise the dictum of the Shafi'ite Ibn-Surayj that he had not met anyone who, occupying himself with *fiqh* and *kalam,* had succeeded in his studies, to whom *fiqh* came easy and who could understand *kalam.* By exploiting the absence of punctuation in the Arabic of the time, Ash'arite *mutakallims* re-edited the dictum as follows: that he had not met anyone who, studying *fiqh* and *kalam,* would have succeeded in his studies, to whom *fiqh* would not have come easy, and who would not have succeeded in understanding *kalam.*[13]

Another important trend in the activity of *mutakallims,* especially of Ash'arites, to legitimise their status, was to ascribe study of *kalam* to generally recognised religious authorities. By exploiting the relative indeterminacy of the terms *kalam* and *mutakallim,* they could in fact count any theologian a *mutakallim* who expressed his opinion on any dogmatic matters whatsoever. As a result even those theologians proved to be *mutakallims* who had a sharply negative attitude of *kalam,* including Shafi'i, the Hanbalite Ibn Aqil (d. 1119), and others.[14]

Mutakallims of both the Mu'tazilite and the Ash'arite schools gave *kalam* out to be the theory and methodology of *fiqh* (*usul al-fiqh*—the sources or principles of law). Ash'arites displayed particular zeal in identifying themselves with defenders of the Sunna and of the opinion of the Moslem community *(ahl as-sunna wa-l-jama'a).* Some apologists for Ash'arite *kalam,* like Ibn Asakir (d. 1178) and Subki (d. 1370), also even resorted, when repelling the attacks of Hanbalites, to creating an image of ‘two-faced’ Ash‘ari—as not only a rationalist *mutakallim* but also a pro-Hanbalite traditionalist (he allegedly rejected an allegorical, metaphorical interpretation of the verses of the Koran, especially those concerned with the divine attributes, in relation to which he insisted, together with Ibn Hanbal, on the formula *bila kayf* (do not ask why). A book of predominantly traditionalist content *al-Ibana ‘an usul ad-dyana (Explanations of the Sources of Religion)* even appeared, the authorship of which was ascribed to Ash‘ari. It was claimed that he was trying, by this book, to placate the Hanbalite Barbahari, a militant critic of *kalam*. In the foreword of the book, the author had declared his adherence to Hanbalism, saying that he professed what Abu-Abdillah Ahmad Muhammed Ibn Hanbal had taught, and disputed everything that contradicted his teaching.[15] The Ash‘arite Ibn Asakir spoke openly of the apologetic mission of *al-Ibana*, saying that it served Ash‘arites as a shield against Hanbalites.[16] It is noteworthy that Ibn Asakir, who himself cited *al-Ibana* in connection with the defence against Ahwazi’s attack on Ash‘arite *kalam,* did not cite it in the list of Ash‘ari’s works that he compiled, which throws an additional shadow of doubt on its authenticity.

The declarations of *mutakallims* about the predominantly apologetic character of their activity also has been examined in the context of the struggle to legitimise *kalam*. According to Iji *kalam* was a science by which one acquired a capacity to demonstrate religious principles by adducing arguments and refuting objections.[17] Mu‘tazilites and Ash‘arites, each in their own key, affirmed that it was *mutakallims* who defended Islam against external and internal enemies. Moreover, whereas Mu‘tazilites defended Moslem dogmas primarily against attack by spokesmen of other religions (Judaism, Christianity, Manicheanism), Ash‘arites defended the same dogmas primarily against the Mu‘tazilites themselves, and also against *falasifa* and other innovators. The hypertrophied idea of *kalam* as the defensive-apologetic theology of Islam arose to some extent from similar statements and separate facts.

In order to appreciate the place of apologetics correctly in the constructs of *mutakallims* we must consider the following facts. Islam (in particular Sunnism, in whose name *mutakallims*, above all Ash'arites, claimed to speak) developed, institutionalised, and canonised precisely law, *fiqh*, and not theology. Given the absence of a system of theology of any kind generally recognised in the regions of the Moslem world, it is not legitimate to speak of an orthodox theology of Islam and, all the more, to take protestations in its defence as pure coin. One can hardly include in the orthodox theology of Islam such theses, defended by *mutakallims*, as the Mu'tazilites' doctrine on freedom of will (of man as the creator of his actions), or the Ash'arites' doctrine of the createdness of the Koran as regards its verbal expression (in which the dogmatists see a depreciations of the holiness of the Word of God), *Mutakallims* primarily defended their own conceptions. They waged their polemic against other creeds and religious and philosophical systems, in the main from the precepts of their own doctrine. In particular, the rationalism of *kalam* was incompatible with the mysticism of gnosticism, and the monotheistic orientation of the *mutakallims* with Christian trinitarians and Manichaean dualism. Among the *mutakallims*' theses there were also ones that formally coincided, as it were, with the general dogmas of Islam.

The *mutakallims* exaggerated their apologetic services. They claimed that they successfully defended the true faith in their works, and drew adherents of other creeds to Islam. In particular, the Mu'tazilites declared that one of their number, Allaf, had been able to draw more than 3000 infidels to Islam.[18] But the words of the Brethren of Purity (*Ikhwan as-safa*) (tenth century) that not a single Jew had been seen up to then who had abandoned his faith thanks to any of them, nor a single Christian who had passed to Islam, nor a single Zoroastrian who had become orthodox thanks to their arguments, had much greater verisimilitude.[19] We also find similar evidence in a thinker who lived two centuries later at the other end of the Moslem world, the Andalusian Ibn Hazm.[20]

Finally, the polemic against other religious and philosophical doctrines served some *mutakallims* in a number of cases as a means of veiled criticism of certain religious dogmas common among Moslems. According to Ibn

Hajar al-Asqalani (d. 1449), the Ash'arite Fakhr ad-Din ar-Razi was accused of citing very strong arguments of the opponents of Islam, but of not troubling himself to find the necessary reply to them, so that certain Magribinites said that the enemy's arguments were taken as real when there was no reply to them.[21] Ibn Qutayba, a contemporary of the Mu'tazilite Jahiz, said roughly the same about him, that he wrote a book in which he adduced arguments put forward by Christians against Moslems, and when he reached the place where he should have refuted them suddenly ceased to present evidence, so that an impression was created that he wanted only to suggest what they did not know to Moslems and to sow doubts among the weak in faith.[22-23]

The *mutakallims*' apologia was primarily one for free speculation and a defence of reason against the encroachments of dogmatic authoritarianism.

THE PRIORITY OF REASON

The *mutakallims* not only took into their armoury in the struggle against fideist-traditionalists verses of the Koran that call for meditation and reflection, but also propounded a number of *hadiths* (traditions about the deeds and sayings of Mohammed) in praise of reason (the authenticity of which, however, was disputed by the dogmatists among the hadith scholars). Whole collections of such hadiths appeared, the best known of which was the *Book of Reason (Kitab al-'aql)* of Dawud ibn al-Muhabbir (first half of the ninth century)—a devout hadith scholar who, however, according to some authors, agreed with the Mu'tazilites who had corrupted him.[24-25] In one of the hadiths propounded in this book, the following was attributed to the Prophet.

> The first thing Allah created was reason. And he said to it 'Turn thy face to Me' and it did. He said 'Turn thy back to me' and it did. And He said: 'Swear by my greatness that I created nothing closer to Me than thee. I draw forth by thee, I endow by thee, I reward and punish by thee'.

This hadith, by which Mu'tazilites reinforced their thesis about the priority of reason, has passed into the history of Islamic thought under the title *hadith al-'aql* ('the hadith of reason'). In speculative Sufism the 'reason' in this hadith will be interpreted in the ontological sense, as a first epiphany of the One (God).

At that time hadiths were in circulation in which it was said that superiority as regards intellect was more highly valued by God than superiority in regard to religion. A man (one of them read) could belong to the people who were successful in observation of fasting, in performance of prayers and pilgrimages, in struggle for the faith (*jihad*), but on the Day of Resurrection he would be rewarded only according to his reason.

The Mu'tazilites instituted a real cult of reason. The hymn of praise of the founder of their Baghdad school, Bishr ibn al-Mutamir, was dedicated to reason:

> How magnificent is reason—the guide
> And companion in happiness and misfortune,
> The judge who decides the absence
> Precisely of things that exist!
> How mightily he whose capacity it is
> To differentiate good and evil.
> And it is he that God selected as
> The fullest sanctity and purity.

By asserting the unconditional superiority of reason, Mu'tazilites placed it at the pinnacle of the hierarchy of the sources of argumentation—higher not only than the Sunna but also of the Koran. In substantiation of this supreme status of reason they adduced the following reasoning: before citing the Sunna of the Prophet or the Koran, it was necessary to prove that a God exists who sent down the Prophet and the Revelation from heaven, and that could only be proved by reason. As a result the Mu'tazilites distributed the sources of argumentation along a descending line in the following order: reason—the Koran—the Sunna—consensus (*ijma'*).[26]

Such, too, was the status of intellect in the teaching of Ash'arites. They usually expressed their rationalism, it is true, in a less demonstrative form. Thus, when listing authoritative sources of argumentation some Ash'arites did not always put intellect above the Koran. In reality their position was analogous to the Mu'tazilist. Both considered tradition (including the Koran and Sunna) within the competence of intellect.[27] *Mutakallims* insisted on the need to hand the palm to what was acquired by reason above that which was received through religious tradition (*taqdim al-'aqli 'ala-n-naqli*).

This priority was affirmed, in particular, within the doctrine of the metaphorical interpretation of the Koran. When the arguments of reason (*'aqliyyat*) came into conflict with religious texts (*sam'iyyat*), *mutakallims* stressed, the latter had to be given a metaphorical or allegorical interpretation, and propounded in accordance with the imperatives of reason. It was Ash'ari's opinion that he who engaged in speculation should begin with study of the arguments of reason, because they were the basis, while the arguments of religious tradition were derivative; the basis was primary while the derived was secondary, so that it was necessary to master the former before the latter. Having assimilated what reason dictated, he should compare what he had obtained with tradition. If he saw in the literal sense of tradition (*zahir*) something that witnessed to its correspondence to what had been obtained by reason, then it was what was sought after, but if not, he should know that according to its own inner sense (*batin*), tradition corresponded to what reason had given.[28] This inner sense was also disclosed by symbolical-metaphorical interpretation. And in any conflict between reason and religious tradition, the dispute should be resolved in favour of the former.

Justifying a symbolical-allegorical interpretation of the sacred texts *mutakallims* turned to their favour even the words of the Koran that directly forbade such an interpretation. In the Koran it says:

> He it is Who has sent down
> To thee the Book:
> In it are verses
> Basic or fundamental
> (Of established meaning);
> They are the foundation
> Of this Book; others
> Are allegorical. But those
> In whose hearts is perversity follow
> The part thereof that is allegorical,
> Seeking discord, and searching
> For its hidden meanings,
> But no one knows
> Its hidden meanings except God.
> And those who are firmly grounded
> In knowledge say: 'We believe

In the Book; the whole of it
Is from our Lord'; and none
Will grasp the Message
Except men of understanding.[29]

Exploiting the absence of punctuation at that time, the Doctors of *kalam* edited the last phrase as follows: 'But no one knows its hidden meanings except God and those who are firmly grounded in knowledge'.[30] Naturally, the *mutakallims* included primarily themselves among those 'firm in knowledge'.

The *mutakallims'* proclaiming of the superiority of reason or intellect over faith was reflected, *inter alia,* in one of the Taftazani's definitions of *kalam* cited above, in which it is qualified as the 'highest of the sciences' because 'it is based on decisive proofs ... most of which are supported by proofs to be believed on authority'. The full digest of all these truths, for *mutakallims,* was not the Koran, as dogmatists considered, but reason. Furthermore, the truth of most of the dogmas propounded in the Scriptures was not confirmed by reason, recognising the rest as 'suprarational', but the contrary—most of the propositions of *kalam* would be confirmed in retrospect by the Koran.

Mutakallims considered it inadmissible to cite the Koran (and all the more the Sunna and opinions of religious authorities) as decisive arguments, when tackling theological-philosophical problems. For them arguments 'from tradition' could have only secondary, auxiliary significance. Their attitude to religious tradition was expressed in the formula 'Proofs from tradition do not yield reliable knowledge'.[31] These proofs did not have apodictic force, and did not rise above opinion (Arab. *zann,* Gr. *doxa*), or probable knowledge. Knowledge whose source was only tradition could not be reliable because it depended on a host of factors. The establishing of the reliability of a tradition depended, for example, on the interpretation of texts, or of their content, by deciphering the paths, metaphors, etc., employed in them. The truths of tradition could only be attributed absolute value in matters of religious and legislative practice.

In that context *mutakallims* developed a conception of their own of 'double truth', calling for a hard and fast line between the two fields—rational-theoretical (*'aqliy-*

yat) and religious-practical (*shar'iyyat*). These fields differed from one another not only in subject but also in methods of cognition. According to Ash'ari,

> For judgement on legal questions which belong to the category of the traditional is to be based on reference to legal principles which likewise belong to the category of the traditional. And judgement of questions involving the data of reason and the senses would be a matter of referring every such instance to (something within) its own category, without confounding the rational with the traditional, or the traditional with the rational.[32]

Besides, truth was single in the theoretical field, but plural in the practical. Here every scholar (*mujtahid*) was right. In *fiqh* truth was relative not only in the sense that another truth could compete with it, but also in the sense that it depended on the conditions of the time. The consensus or unanimity of authoritative scholars on a question had force only to the end of a given century. The constant need for *ijtihad* (scholar's pronouncements of their own decision on matters of *fiqh*) stemmed from the fact that the cases examined in religious-legislative practice, were countless, because their number grew together with the accumulation of concrete facts.[33]

The critical spirit characteristic of *kalam* found expression in *mutakallims*' attitude to religious tradition. They proclaimed doubt a methodological principle of knowledge. The precepts expressed in such formulas as 'fifty doubts are better than one conviction' or 'the first condition of any knowledge is doubt', reflected their general approach to both philosophical and scientific questions. Mu'tazilites and Ash'arites considered it necessary for every Moslem man and woman to reach the stage when positively all existing religious ideas were subjected to doubt. Ash'ari stressed that Islam was invalid for him who, on reaching maturity, did not doubt.[34] Mu'tazilites were even more demanding: a person was obliged to doubt everything even before reaching maturity—as soon as self-awareness developed in him.

At that stage, Ash'ari said, a person should not hasten to accept a certain teaching and not some other, on the basis of *taqlid,* nor incline toward some one proposition and not another just because the spirit was in it, and not the other, nor to nourish an inclination to certain doctrines and not others out of calculation to win influence or power in this world; or because this is the teaching of his fathers and fellow citizens, to which they were brought up and to which they are accustomed. On the contrary, he should approach all these doctrines exactingly and demandingly, fastidiously and critically, so statements that differ from one another and doctrines that contradict each other would be equivalent in his eyes and identically true or false.[35] That critical stance also explains the fact, which outraged the opponent of *kalam* Ibn Hazm. In the works of Ash'arites, as far as he knew, there was no chapter devoted to refuting the sceptical principle of the equivalence of arguments (*tafaku' al-adilla*), from which it followed that one religious doctrine could not be set above another or one theory dominate another.[36]

The *mutakallims'* realistic and critical spirit was distinctly displayed as well in the anti-authoritarian orientation peculiar to *kalam*. They resolutely rejected *taqlid*, i.e. uncritical following of authorities, and condemned *mukallids*, or *imitators*. According to Taftazani, many of the theologians and all the jurists considered faith, based on *taqlid* true, but Ash'ari, Mu'tazilites, and many other *mutakallims* denied its truth. Without preliminary doubt and mental exercises there was no true faith. As Maturidi stressed, everyone was obliged to know the truth of what he believed. The truth of any teaching was attested by reason and not by the fact that some authority and even the majority of people affirmed it. A person could not say that he held what the majority believed precisely because one may prove right while the many may prove wrong.[37]

Denial of the truth of a belief not based on rational arguments (as embodied in the formula *takfir al'awamm*, i.e. declaration of the common people as unbelievers) bordered on the teachings of the Jahmites, Ash'arites, and Maturidites with extreme religious tolerance. For these *mutakallims* formal membership of the Moslem community was sufficient to count a person a believer. In particular, a person who had committed a heinous sin was not excluded from the Moslem community and was not qualified as an unbeliever (*kafir*). According to the Ash'arites no actions incompatible with the prescriptions of Islam could serve as grounds for an accusation of unbelief. Furthermore, Ash'arites and Maturidites said that he who believed in his heart but did not profess in words was a believer all the same in the eyes of Allah. Faith was thus a deeply personal affair, not admitting of any hypocrisy. Only God had the right to judge the faith of anyone. All Moslems, devout and impious, would be saved. The sinner, no matter how much he yielded to temptation, would go to paradise so long as he repented before death. And even the unrepentant could be saved in the end. God would most likely forgive their sins. At worst the sinner would spend a certain time in hell, and then, Ash'ari stressed, would obligatorily be transported to heaven.[38]

The educational orientation of the *mutakallims* was connected with their fanatical striving to train the common people, the masses, in rational methods of discourse, and arguments of reason. Their calls to inculcate a capacity for critical thinking in children from an early age were not abstract slogans divorced from life. Evidence of that, in particular, was the circles they organised for children and youths, to which even ideological opponents of Mu'tazilism sent their sons and daughters. Assemblies (*majalis*) of *mutakallims* were common; they were not only a place where the Doctors of *kalam* could demonstrate their skill in carrying on a dispute but also a school of theoretical, primarily critical thinking for the broad public.

The spirit that prevailed in these gatherings can be judged from the story of the Spanish Moslem Abu 'Umar Ahmad ibn Sa'di. On his return home after visiting Baghdad at the end of the tenth century, he was asked: 'Did you attend a meeting of *mutakallims*?'—'I went twice,' he replied, 'and of course did not go any more.' 'Why not?' 'Well, judge for yourself. At the first meeting I attended, there were not only Moslems present, both orthodox and sectarian, but also unbelievers, Persian fire-worshippers, Dahrite atheists, Jews, and Christians. There were unbelievers enough of every kind. Each group had its leader obliged to defend its convictions. And each time one of them entered the hall everyone respectfully rose and did not sit down until he did. When all were assembled, one of the unbelievers said: "We are gathered in order to argue. You know all the conditions. You, Moslems, will not quote arguments at us taken from your Book or based on the authority of your Prophet, since we do not believe in either the one or the other. Each must confine himself to arguments drawn from reason." At those words, everyone began to applaud. You will agree that once having heard such things I could no longer stay there. I was invited to attend another meeting. I went, but it turned out to be the same scandal.'[39] All that happened at the end of the tenth century in Baghdad when the era of the 'flowering' of *kalam* had already passed. One must note that the situation described in this story was characteristic of 'gatherings of *mutakallims*', irrespective of whether members of other creeds were present or not.

The following fact, reported by the geographer Qazwini (d. 1282), about the inhabitants of the Khorezm town of Jurjan (Urgench), is eloquent evidence of the success *mutakallims* had in attracting a broad audience into the orbit of speculative arguments. They were all Mu'tazilites, he reported, and were mainly occupied with the science of *kalam,* even in the bazaars and the streets. They disputed about matters of *kalam,* with no intention to defend a certain point of view. And if someone made himself conspicuous in the pursuit of this aim, everyone was outraged and said: One could only win in a dispute on the basis of evidence, and you are behaving like an ignoramus.[40]

The rationalism of *mutakallims* and their conviction of the sovereignty of intellect were also manifested in the doctrine of the rational nature of the beautiful (good) and the ugly (evil), common to Mu'tazilites, Jakhmites, and many *mutakallims* among the Qarramites and Kharijites. A predominance of theistic voluntarism was characteristic of the religious-ethical thought of Islam, and of Christianity and Judaism before it. It was the exclusive prerogative of God alone to understand good and bad, good and evil. It was indicative in that respect that Adam and Eve were driven from paradise by the Biblical God after they became capable, having eaten of the tree of knowledge, of distinguishing between good and evil, and had become gods. Furthermore, it was considered that God's free will commanded what things, properties, and acts were to be qualified as good and what as bad. The fine and ugly were thus not immanent properties of things but arbitrary characteristics of them: the beautiful or fine was what God ordained and the ugly or outrageous what he forbade. It went without saying, moreover, that God could command differently, and give things other characteristics.

The conventional conception based on *hadith* ascribed to the Moslem prophet 'What Moslems see as beautiful is also beautiful in the eyes of God' represented a certain way out of the confines of theistic voluntarism. According to this conception the good and bad could be established by a consensus of the community of believers. Mu'tazilites and certain other *mutakallims* went further toward recognising the objective nature of ethical qualifications. In their opinion beauty and ugliness were not only immanent in things but also primary in regard to divine law. A thing was not good because it was pleasing to Allah, but was pleasing to Allah because it was good.

The Mu'tazilites' ethical objectivism was directly linked with their rationalism; reason could independently distinguish between good and evil, without divine revelation and religious laws. 'What a terrible statement!', a mediaeval writer exclaimed apropos of that. For if that was how matters stood, then Allah would not have sent the Prophet to his creatures, would not have sent His Book down to them, would not have decided what He decided, would not bind by duty and would not liberate from it. For the slaves of God could manage with the knowledge they found in their intellect.[41] Such fears were not abstract. The proposition that 'reason can function independently of the Revelation', common to Mu'tazilites, Zaydites, and Kharijites, led to the people called Atrafites (Arab. *taraf*, edge; pl. *atraf*), who taught about duty based on reason and religion based on reason, justifying those who lived on the edge (*atraf*) of the world where the divine laws had not penetrated, and who therefore based their religion on reason.[42] A virtuous life was thus possible on the basis of people's intellectual capacities.

Ash'arites, inclined to delimit the sphere of the rational-theoretical and religious-practical and, perhaps, as well, to allocate religion the role of regulator of ethico-practical life, denied legalising force to reason, although they were prepared to recognise in part its epistemological capacity in the ethical sphere. But Mu'tazilites, too, were inclined to some extent to such a position, recognising that many ethical norms (and the measures of reward and punishment and most of the rituals corresponding to them) did not come into the province of reason.

The opponents of *kalam* among the dogmatic theologians treated its rationalism as a danger to the true faith. According to Ibn al-Jawzi, *kalam* led most *mutakallims* into doubt and some into disbelief (*ilhad*).[43] In support of that could be cited those thinkers of the age of the flourishing of *kalam* who went far in their critical attitude to religious dogmas (Abu Isa al-Warraq, Ahmad ibn al-Tayyib as-Sarakhsi, Abbad ibn Sulayman, Thumama ibn al-Ashras, Isa as-Sufi, and others). But the most famous of these 'apostate' *mutakallims* was Ibn ar-Riwandi (ninth century).

THE ATHEISM OF IBN AR-RIWANDI

In the teaching of Ibn ar-Riwandi the ethical rationalism of the Mu'tazilites developed in the stream of anti-prophetism. In the separate extracts of his works that have come down to us under the title *As-Zumurrud (Emerald)*, Ibn ar-Riwandi turned his criticism against the truthfulness of prophecy in general—not only against Mohammed but also against Jesus, Moses, Abraham, and others. But only the part of his objections to concrete prophets that has come down to us concerns the emissarial mission of Mohammed.

The author of *As-Zumurrud*, speaking in the name of certain Brahmins (*barahima*), set out a number of arguments intended, on the basis of a proposition about reason as the highest criterion of truth, to refute the truthfulness of prophecy as such. One of these arguments was that he and all people considered it firmly established that intellect was the greatest blessing sent down from heaven by God to his creatures, and that both the Lord and the blessings coming from Him were discovered by reason. Thanks to reason God's bidding and ban, temptation and intimidation proved possible. If God's messenger brought confirmation of what reason counted as good or evil, proper or reprehensible, then there was no longer any necessity to pay attention to his arguments and to respond to his calls, since we managed without it by what was in reason, and prophecy of such a kind was a mistake. But if he brought something that contradicted what reason considered good or evil, permissible or reprehensible, there was no necessity for us to recognise his prophetic mission.[44]

But the Prophet, Ibn ar-Riwandi said further, although he witnessed to the greatness of reason, himself taught quite contradictory things, such as, for example, prayers, ritual actions, pilgrimages to Mecca, and the seven circlings of the Kaaba, an ordinary structure that 'neither sees nor hears anything', and the circling of which differs in no way from circling any other house; running between the stones called as-Safa and al-Marwa, from which people derived neither benefit nor harm, the way between them being in no way different from that between any other rocks. All these were things, he said, for which there was no necessity from the standpoint of reason.[45]

When ridiculing religious ideas about the influence of supernatural powers on earthly events, Ibn ar-Riwandi recalled certain episodes from the life of Mohammed connected with his military activity. The angels sent down from heaven by Allah on the day of the battle at Badr to sustain the Prophet as was claimed, proved so weak and helpless, he said, that although they were many and their force was joined to that of the Muslims, they did not manage to kill more than seventy men. And further, he asked where were the angels on the day of the battle of Uhud, when the Prophet hid himself in fear among the dead? Why did they not help him in those circumstances?[46]

Similar sarcasm is heard in Ibn ar-Riwandi's words about ideas of prophets as teachers of various crafts, arts, and knowledge. Whoever believed in prophecy should recognise that the Lord also told the Prophet to teach people to draw sounds from lutes, otherwise where would they get to know that if they dried sheep gut, fastened it to a bit of wood, and struck it, they would get a melodious sound from it. In Ibn ar-Riwandi's conviction, science had no divine origin. He said, for instance, that people had established the rise and setting of stars from their observations of them, and had not needed prophets in the least for that.[47] He also denied the divine origin of language from similar positions.

Ibn ar-Riwandi also refuted arguments for the truthfulness of prophecy based on the reality of miracles. He explained the latter as more or less cryptic tricks, the secret of which it was not always easy to reveal. But if tidings of them were communicated by a certain group of people; then (he explained) it was quite probable that there was a conspiracy of perjurers. Incidentally, he added, it was Mohammed who refuted the legend about the crucifixion of Jesus Christ, exposing it, in spite of its being affirmed by countless people among Jews and Christians; and if the Prophet's example were to be followed, it would be all the more legitimate to deny legends about the miracles he allegedly performed.

The legends of these miracles had been incorporated into Islam independently of the Koran, in which only one miracle was recognised, the writing of it. By Ibn ar-Riwandi's time a whole doctrine of the inimitable stylistic merits of the Koran (*i'jaz al-Qur'an*) had taken shape, that could serve as weighty evidence of its divine inspiration. Ibn ar-Riwandi also did not ignore the attempt to substantiate the truth of Mohammed's prophetic mission somehow. First of all, he (like Mu'tazilites as a whole) denied the literary, stylistic superiority of the Koran. He claimed that there were utterances of the pre-Islamic sage Aktham ibn Savfi more eloquent than those in the Koran. Furthermore, even if one admitted the stylistic superiority of the Koran, that could not be taken as a weighty argument in the eyes of non-Arabs, to whom its language was unintelligible. Finally, if inimitableness were counted evidence for the truth of prophecy, then such thinkers as Euclid and Ptolemy could lay claim to true prophecy, citing the inimitability of their works.[48]

Ibn ar-Riwandi claimed, furthermore, that the Koran was not the Wise Word, as it contained contradictions, mistakes, and absurdities. In particular he found a contradiction between the following verses:

> 29. It is He Who hath created for you
> All things that are on earth;
> Moreover His design comprehended the heavens,
> For He gave order and perfection
> To the seven firmaments;

and

> 27. What! Are ye the more
> difficult to create
> or the heaven (above)?
> (God) hath constructed it.

28. On high hath He raised
Its canopy, and He hath
Given it order and perfection.
Its night doth He
Endow with darkness,
And its splendour doth He
Bring out (with light).
30. And the earth, moreover,
Hath He extended
(To a wide expanse).[49]

It followed from the first, he claimed, that the earth was created before the heavens, and from the second that heaven was created first. There was no correspondence, he considered, between the verse of the Koran in which it spoke of the creation of the world in six days.

38. He created the heavens
And the earth and all
Between them in Six Days...

and another verse according to which the creation took eight day to complete:

9. Say: Is it that ye
Deny Him Who created
The earth in two Days?..

10. He set on the (earth),
Mountains...
And bestowed blessings on
The earth, and measured therein
All things to give them
Nourishment in due proportion,
In four Days...

12. So he completed them
As seven firmaments
In two days.[50]

The following verses also contradict each other, according to Ibn ar-Riwandi:

53. Say: O my Servants who
Have transgressed against their souls!
Despair not of the Mercy
Of God: for God forgives
All sins: for He is
Oft-Forgiving, Most Merciful.

28. He warns you: truly
God guides not one
Who transgresses and lies![51]

Ibn ar-Riwandi counterposed to the verse of the Koran

> So fight ye against the
> Friends of Satan: feeble indeed
> Is the cunning of Satan...

the following verses:

> 19. The Evil One has
> Got the better of them;
> So he has made them
> Lose the remembrance
> Of God...
>
> 63. ...but Satan
> Made, (to the wicked),
> Their own acts seem alluring:
> He is also their patron to-day;
> But they shall have
> A most grievous penalty,

and commented on them as follows: was he really feeble who drove Adam from paradise and turned many people from the religion of their Lord?![52]

Ibn ar-Riwandi pointed out, furthermore, certain absurdities, as he thought, of the actions of God told about in the Koran. How could God, he said indignantly, to be proud of his cunning or his sowing of discord among people, while at the same time threatening those with eternal hell fire who sowed discord among believers?[53] Was it necessary because of one she-camel to exterminate a whole people, the Thamuds, the people of the prophet Salih?[54] And in general, he asked in his book *Ad-Damigh (Scathing Critic of the Koran)*, why did he who had no other medicine for illness than killing, like an evil, irascible enemy, send down a book to him from heaven, or a prophet?[55]

The existence of evil in the world, Ibn ar-Riwandi said, contradicted the common idea of the justice, benevolence, and rationality of God. In his view, he who spread illness among his servants could neither be wise in what he did with them nor care about them, nor be merciful to them, nor could he who committed them to needs and troubles be such.. He who called those to obey him whom he knew would not, could not be wise. And if those who refused to believe in him and obey him, were doomed to eternal agony in hell, then he would neither be wise nor know the measure of reward and punishment. The unjust distribution of worldly goods, from Ibn ar-Riwandi's point of view, by which the famous sage could not ensure himself his daily bread, but God endowed the miserable ignoramus with wealth, impelled people to atheism *(zandaqa)*.[56] According to one version it was poverty that had been the cause of Ibn ar-Riwandi's own retreat from the 'true faith'.

Ibn ar-Riwandi has gone down in the history of Moslem culture as the first of the 'three famous atheists in Islam' (after him there were Maarri and Tawhidi). But the traditionalist dogmatists like Ibn al-Jawzi threatened him that 'on the Day of Resurrection God would be more severe with him than with Satan'.[57]

The problem of faith and reason, which the *mutakallims* decided from a rationalist position, is a projection onto the epistemological field of a more general matter—the question of the relation of god and the world.

NOTES TO CHAPTER 2

[1] Ibn al-Jawzi. *Talbis Iblis* (Dar al kutub al-'ilmiyya, n.d.), pp 82-83; G. Makdisi. *Ibn Qudama's Censure of Speculative Theology.* An edition and translation of *Ibn Qudam's Tahrim an-nazar fi kutub ahl al-kalam* (Luzac & Co., London, 1962), pp 12, 43.

[2] Al-Ash'ari. *Istihsan al-khwad fi 'ilm al-kalam.* In: R. J. Mc-Carthy (Ed. and transl.) *The Theology of al-Ash'ari* (Imprimerie Catholique, Beyrouth, 1953), p 120.

[3] See *The Holy Qur-an,* verses 6: 75-79.

[4] *Ibid., 36 : 12.*

[5] See: Al-Juwayni. *Ash-Shamil fi usul ad-din,* Vol. 1 (Dar al-'arab, Cairo, 1960/1), pp 30-31.

[6] See: Al-Jahiz. *Kitab al-hayawan,* Vol IV, (Matba'at al-Babi al-Halabi, Cairo, 1938-45), p 109.

[7] *Ibid.,* Vol. I, pp 216-217; J. Van Ess. *Das Kitab an-Nakt des Nazzam* (Vandenhoeck and Ruprecht, Göttingen, 1972), pp 119-120.

[8] See: Al-Jahiz. *Op. cit.,* Vol. II, p 134.

[9] See: Ramadan-efendi. *Sharh 'ala sharh al-'Aqa'id* (Al-Matba'a al-'usmaniyya, Istanbul, 1898), p 22.

[10] See: Al-Isfahani. *Sharh Matali' al-anzar* (Al-Matba'a al-khayriyya, Cairo, 1905), p 5.

[11] See: At-Taftazani. *Sharh al-Maqasid,* Vol. 1 (Matba'at Muharram-efendi, 1888) p 14.

[12] See: Ibn Qutayba. *Ta'wil mukhtalif al-hadith* (Matba'at Kurdistan al-'ilmiyya, Cairo, 1908), p 71.

[13] See: As-Subki. *Tabaqat as-shafi'iyya al-kubra,* Vol. 2 (Hussainiya Press, Cairo, 1906), p 89: *'Ma ra'aytu mina-l-mutaffaqihati man-ishtaghala bi-l-kalami fa-aflaha yafutuhu-l-fiqhu wa-la yastati'u ma'rifata-l-kalam'.*

[14] *Ibid.*, p 258.

[15] See: Al-Ash'ari. *Kitab al-ibana 'an usul ad-diyana* (Da'irat al-Ma'arif Press, Hyderabad, 1903), p 203.

[16] Ibn 'Asakir. *Tabyin kadhib al-muftari fi-ma nusib ila-l-imam Abi-l-Hasan al-Ash'ari* (Taufiq Press, Damascus, 1928), p 388.

[17] Al-Jurjani. *Sharh al-Mawaqif*, Vol. 1 (Dar at-tiba'a al-'amira, Istanbul, 1894), p 26.

[18] Al-Balkhi *et al. Fadl al-i'tizal wa-tabaqat al-mu'tazila* (Ad-dar at-tunisiyya li-n-nashr, Tunisia, 1974), p 251.

[19] See: *Rasa'il Ikhwan as-safa,* Vol. III (Dar Sadir, Beirut, 1957), pp 536-537.

[20] For example, in his treatise *Risalat al-bayan 'an haqiqat al-imam.*

[21] See: Ibn Hajar al-'Asqalani. *Lisan al-mizan* (Mu'assasat al-A'lami, Beirut, 1971), pp 427, 172.

[22] See: Ibn qutayba, *Op. cit.*, p 71.

[23] See, for example, *The Holy Qur-an,* verses 45 : 5, 13; 3 : 190-191; 7 : 185.

...5. And in the change
Of the winds—are Signs
For those that are wise...

...13. In that are Signs indeed
For those who reflect.

190. Behold! In the creation
Of the heavens and the earth,
And the alteration
Of Night and Day,—
There are indeed Signs
For men of undestanding,—

191. Men who celebrate
The Praises of God,
Standing, sitting,
And lying on their sides,
And contemplate
the wonders of creation....

[24] See: Az-Zahabi. *Mizan al-i'tidal* (Matba'at al-Babi al-Halabi, Cairo, 1907), p 324.

[25] Al-Jahiz. *Kitab al Hayawan*, Vol. VI, p 292.

[26] See: 'Abd al-Jabbar. *Sharh al-usul al khamsa* (Wahba Press, Cairo, 1965), p 88.

[27] See: Ibn Furak. *Op. cit.*, p 319; Al-Baqillani. *At-Tamhid* (Dar al-fikr al-'arabi, Cairo, 1947), p 39; Al-Mwardi. *Adab al-qadi,* Vol. I (Ri'asat diwan al-awqaf, Baghdad, 1971), pp 274-275.

[28] See: Ibn Furak. *Op. cit.*, pp 319-320.

[29] *The Holy Qur-an,* verses 3 : 7.

[30] See, for example, 'Abd al-Jabbar. *Sharh al-usul al-khamsa,* p 603.

[31] See: Al-Jurjani. *Op. cit.*, Vol. 1, p. 209; At-Taftazani. *Sharh al-Maqasid.* Vol. I, p 53.

[32] R. G. McCarthy (Ed. and translator). *The Theology of al-Ashari,* p 95.

[33] See: Ibn Furak. *Op. cit.,* p. 193; Ash-Shahrastani. *Al-Milal,* Vol. II, p 4; Ramadan-efendi. *Op. cit.,* p 12.

[34] See: Ibn Hasm. *Kitab al fisal* (Al-Matba'a al-adabiyya, Cairo, 1899-1903), Vol. IV, p 35.

[35] See: Ibn Furak. *Op. cit.,* p 250.

[36] See: Ibn Hazm. *Op. cit.,* Vol. V, p 119.

[37] See: At-Taftazani. *Sharh al-Maqasid,* Vol. II, p. 264: al-Maturidi. *Kitab at-tawid* (Dar al-mashreq, Beyrouth, 1970), p. 3; Abd al-Jabbar. *Al-Mughni fi abwab at-tawhid wa-l-'adl* (Wazarat ath-thaqafa wa-l-irshad al-qawmi, Cairo, 1960-5) Vol. XII, p 123.

[38] Ramadan-efendi. *Op. cit.,* p 258; Ibn Furak, *Op. cit.,* p 164.

[39] Quoted from P. Juzi. *Mutaziliti* ((The Mu'tazilites), (Kluchnikov's Printing Press, Kazan, 1899), pp 264-265.

[40] See: Al-Qazwini. *Athar al-bulad wa-akhbar al-'ibad* (Dar Sadir, Beirut, 1960, p 520).

[41] See: Abd al-Kafi. *Al-Mujaz.* In: Talibi, 'Ammar. *Ara' al-khawarij al-kalamiyya* (Ash-Sharika al-wataniyya li-n-nashr wa-t-tawzi', Algiers, 1978), Vol. II, p 146.

[42] See: Ash-Shaykh al-Mufid. *Awa'il al-maqdat* (Tabriz, 1952), p. 12.

[43] See: Ibn al-Jawzi. *Talbis Iblis,* p 82.

[44] See: Al-A'sam, 'Abd al-Amir. *Ta'rikh Ibn ar Riwandi al-mulhid* (Dar al-afaq al-jadida, Beirut, 1975), p 82.

[45] *Ibid.,* p 125.

[46] *Ibid.,* p 133.

[47] *Ibid.,* p 134.

[48] See: Ibn al-Jawzi. *Al-Muntazam fi tarikh al-muluk wa-l-umam* (Da'irat al-Ma'arif Press, Hyderabad, 1938), Vol. VI, p 100.

[49] *The Holy Qur-an,* verses 2 : 29; 79 : 27-30.

[50] *Ibid.,* verses 50 : 38; 41 : 9-12.

[51] *Ibid.,* verses 39 : 53; 40 : 28.

[52] *Ibid.,* verses 4 : 76; 58 : 19; 16 : 63. See also: Ibn al-Jawzi. *Op. cit.,* p. 102; Ar-Razi, Fakhr ad-Din. *Nihayat al-ijaz* (Cairo, 1899), pp 165-167.

[53] *The Holy Qur-an,* verses 3 : 54; 8 : 30; 6 : 53; 29 : 3; 58 : 10.

[54] *Ibid.,* verses 7 : 73-78; 11 : 61-67.

[55] See: Ibn al-Jawzi. *Op. cit.,* p 102.

[56] See: Al-Khayyat. *Kitab al-Intisar* (Imprimeries Catholique, Beirut, 1957), p 12; As-Subki. *Op. cit.,* Vol. III, p 97.

[57] As-Subki. *Op. cit.,* pp 104-105.

3

God and the World

In Islam as in other revealed religions, the relation of God and the world is thought of primarily as a relation of creator and created. And in it problems are brought to the fore connected with the character of the divine creation—were things created from some pre-existing matter or from nothing? what was the length of the process? and so on.

THE PROBLEM OF CREATION

For the thinkers of Islam, Christianity, and Judaism the Biblical picture of the creation was the starting point for interpretation of the relation of God and the world as Creator and created. But neither in the Old Testament nor in the Koran is there any clear indication that the world was created from nothing, although that formula became dominant among the 'orthodox' of all three religions, so that the alternative formula—creation from pre-existing material—began to be treated as heretical.

Religion is oriented, in the first place, to the consciousness of the masses, of ordinary people, and to their commonsense. But commonsense perceives creation only in its ordinary meaning—only in the material, bodily sense, i.e. as something resembling the work of a potter. For commonsense God the Creator is a skilful craftsman (the demiurge in Plato's doctrine), who created the world as a vast work of handicraft not only according to a preconceived plan but also from given, pre-existing material. The creation was therefore originally described in mythological images which later permitted their interpretation in the sense of the pre-existence of matter. The first defenders of Islam, like the first apologists of Christianity, did not immediately understand and recognise the idea of 'creation from nothing'.

It is difficult to establish who was the first of the Judaic thinkers to arrive at the idea of creation from nothing. We know only that Philo, following the Platonic conception of creation from pre-existing matter, considered the pre-existing matter itself creation 'from nothing'. We know also that among the Jewish theologians living in the first centuries of Islam and writing in Arabic there were heretics who declared the creation of the world from eternal matter and demonstrated the congruity of this conception with the Biblical teaching of the Creation. In fact, in the Bible, in the apocryphal Book *The Wisdom of Solomon,* it speaks of 'thy [God's] all-powerful hand which created the world out of formless matter'[1]. The Christian theologians Justin and Athenogoras repeated this purely Greek philosophical formula of creation from amorphous material.

Christianity first came to a conscious posing of the question of a special divine creation 'from nothing', and to understanding of the significance of such a creation for demonstrating God's absolute power and for preventing possible heretical conclusions from recognition of creation from pre-existing matter (like, for example, the conclusion of the imponderability of the world) in the person of two Syrian theologians, Tatian and Theophilus, and the eminent Church father Tertullian. When affirming the Creation from nothing these theologians could not simply appeal to the Bible. But in the *Second Book of Maccabees,* they found a phrase that readily lent itself to interpretation in the spirit of creation 'from nothing', where it said that the Lord created heaven and earth and all things 'not from things existent'.[2] The Church Fathers, from the Pastor of Hermas to John of Damascus, began, on the basis of that statement, to describe the creation of the world as creation 'from the non-existent', in which non-existent was understood as nothing. The Latin term *ex nihilo* appeared first as a translation from this Biblical expression 'not from things existent'.

Matters were analogous with Koranic cosmology. In the Koran there are certain indications of creation *ex nihilo,* to which the Arabic formulas *min lays (ex non esse), la* *min* (or *la 'an) shay'* (not from something), *min la shay'* (from not something), *min al-'adam* (from privation), and *min la wujud* (from non-existence) correspond. As for the verse where the Koran speaks of the creation of people *min ghayri shay'*[3] this expression means 'to no purpose' or 'by nothing' and not 'from nothing', as is sometimes found in translations of the Koran. And the place in the Koran where God is described as the creator is not evidence of creation of the world from nothing. Semantic analysis of the words of the Koran that express the concept 'to create' (*khalaqa, sawwa,* and *sawwara*) shows that nothing was understood by them by any means equivalent to the concept of creation from nothing, but rather the following: *khalaqa* signified 'to (make) even, align, equalise'; *sawwa* 'to (make) even, align, equalise'; and *sawwara* 'to give form or to shape or mould'. Thus all the Koranic terms that express creation of the world, presuppose the existence of some primordial matter. In addition, the epithet *badi* in the expression '*badi*' of the heavens and the earth', which is met twice in the Koran,[4] began to be used in the sense of Creator only in a context of the metaphysical theories of Islamic philosophers, although it signified only that Allah had nothing like himself either on earth or in heaven.

To that we must add that the Koran contains quite a few verses that readily lend themselves to interpretation in the sense of some kind of material preceding the act of creation. Such, in particular, are the following:

7. He it is Who created
The heavens and the earth
In six days—and His throne
Was over the Waters.
11. Moreover He comprehended
In his design the sky,
And it had been (as) smoke.[5]

Upholders of the theory of the eternity of the world, in particular the Islamic Aristotelians, would demonstrate the insolvency of the thesis of creation 'from nothing' by these and similar verses. 'For it is not stated in Scripture,' Ibn Rushd noted, 'that God was existing with absolutely nothing else: a text to this effect is nowhere to be found'.[6] The many places in the Koran where it speaks of God's creation of everything living from water, man from clay, the devil from fire, and so on, could also serve as confirmation of such an interpretation.

The fact of the absence in the Koran of unequivocal evidence for creation 'from nothing' was used by the *falasifa* to defend their doctrine of the eternity of the world, which they understood in two ways: (1) in the sense of the eternity of the matter from which things of the sublunar world—the world of generation and corruption—were created; (2) in the sense of the eternity of the superlunar world, which was not subject to generation and corruption. The *mutakallims* laid stress on the transitional character of existent things.

The empirical, phenomenal world was described by *mutakallims* in terms of 'substance' (*jawhar*) and 'accident' (*arad*). By substance they understood body as the bearer of given qualities. Accidents embraced all the spatial and temporal, quantitative and qualitative characteristics of a body (substance); they included sensory qualities (colour, taste, smell, warmth and cold, moisture and dryness, etc.); measurement (length, breadth, depth), and figures; states (*akwan*)—combination and separation, motion and rest; human actions, and so on. Accident was characterised by two main properties: (1) it required a substratum (substance) and could not serve as the substratum for another accident; (2) it was not an inner, immanent attribute of a body but was a transient property that moved into it.

There was no unanimity among the *mutakallims* of the ninth century on the question of the length of an accident's existence, and on its continuous renewal. Thus, according to Allaf and Jubbai, motion was constantly being renewed and did not endure over the course of two consecutive moments of time; other accidents, in particular colour, taste, smell, life, and knowledge, were preserved. Qabi considered that all accidents were constantly being renewed. Such, too, was the opinion of Dirar and Najjar, who considered a body a totality or concatenation of different accidents.[7]

The dynamic view of bodies and their qualities was developed in its most consistent form among Mu'tazilites by Nazzam, though he, it is true, recognised only one property of bodies as an accident, viz., motion. The other sensory qualities (colour, smell, taste, etc,) he considered bodies. In accordance with that he taught the interpenetration (*tadakhul, mudakhala*) of bodies (which resembled the Stoics' conception of total mixing). In fruit, for example, colour, odour, and taste were blended. Opposites also penetrated each other: sweet and bitter, cold and hot. According to Nazzam, not only accidents were constantly renewed but also bodies. The tenet of the continuous renewal of substance became the object of most *mutakallims*', especially Ash'arites', criticism. If it were admitted, Juwayni said, then neither the dead could come back to life nor the living die, because he who was dead was not he who was alive before death; it equally followed that one and the same person could be in the far east at one moment and in the far west at the next, which was absurd.[8]

In the Ash'arite stage of the development of *kalam,* the doctrine of the constant renewal of accident became dominant. It began to be considered that the main characteristic of accident was that it did not exist over two moments of time. The notion of the origination of accidents in time—*huduth*—was linked with the dynamic view of them. The proof that all bodies, both heavenly and terrestrial, had a beginning in time, was based on the following premisses: (1) a body was inseparable from accident; (2) accident had a beginning in time; (3) that which was inseparable from what had a beginning in time itself had a beginning in time.

But it by no means follow from the affirmation that the world has a beginning in time that there was a time when God was, but the world was not yet. According to Shahrastani, it was impossible to imagine a time that separated the being of the All-Highest from the world.[9] *Mutakallims* did not admit a sequence going back infinitely into the past. They represented the development of the world in time on the analogy of a series of natural numbers that has a beginning but has no end. The beginning of the world, however, did not have a physical character and did not signify origination in time, but rather had a metaphysical nature, since time itself in *mutakallims*' view (as with Plato) had a beginning, and arose together with the world.

While *mutakallims* suggested some timeless, metaphysical beginning of the world, they also denied the onset of its end. On the testimony of Ibn Rushd 'they also agree with the ancients in the view that future time is infinite and likewise future being'.[10] God, said Maturidi, was wise, and a wise craftsman did not make a thing in order then to destroy it; therefore the world had been created for ever.[11]

The *mutakallims'* doctrine that the world had a beginning in time was thus very far from the theistic creationism that suggests the limitedness of the world in time. The *mutakallims* also diverged from theism in fact in their thesis about the origin of things from nothing (*al-'adam*), although it admits at first glance of an interpretation in the sense of creation *ex nihilo*. Shahrastani, explaining this thesis of Ash'arite *mutakallims,* wrote that one should get this illusion out of one's system so that it would not seem that the origin of things from nothing (*la shay'*) was implied by the origin of things from not-being. When it was said, he wrote, that not-being preceded things, it was only implied that they were not and then were.[12] It was consequently a matter not of the creation of things from nothing but of their transformation from one form to another.

Mu'tazilites went further in this direction than Ash'arites. By their doctrine of *madum* (pl. *ma'dumat*), not-real, they formally recognised the creatability of the world from nothing as it were: all things passed, through the activity of Allah, from a state of not-being into a state of being, from not-real to real. But in fact they reduced that recognition to nought by their thesis 'a *madum* is a thing (*shay*)', and not absolute, pure nothing. But their attempt to camouflage their negation of theistic creationism by the equivocal term '*madum*' was quickly exposed by the most perspicacious of their opponents, who noted that, while believing in the eternity of the world but being afraid to proclaim it openly, the proponents of the thesis that a *madum* was a thing put forward a proposition that led of necessity to affirmation of the eternity of the world.[13]

The doctrine of *madum* easily lent itself to interpretation in the sense of recognition of the eternity of the matter from which God created the world. Such an interpretation was put forward by Shahrastani, who completed his discussion of the problem of *madum* by saying that the Mu‘tazilites’ thesis was nothing other than the doctrine of certain *falasifa* that *prima materia* existed before the existence of form.[14] Ibn Rushd came to a similar conclusion; having noted the similarity of the Mu‘tazilites’ doctrine of *madum* and the Aristotelian conception of *prima materia* or primary substance as a potential that preceded existence in reality, he suggested, however, that both the philosophers and Mu‘tazilites agree about the existence of this entity; only the philosophers are of the opinion that it cannot be exempt from a form actually existent, i.e. that it cannot be free from existence, like the transition, for example, from sperma to blood and the transition from blood to the members of the embryo.[15] Most contemporary scholars also reduce *madum* to matter in its Aristotelian or Platonic understanding, sometimes suggesting that the Mu‘tazilites confused these understandings in their doctrine.

The similarity between *madum* and matter was limited in fact to their ontological status of a potentially existing thing that in itself lacked phenomenal being. The very fact that *ma‘dumat* were infinite in number,[16] was evidence of the fundamental difference of *madum* from primary substance in the concept of which any multiplicity is without meaning.

In the Mu‘tazilites’ doctrine *ma‘dumat* implied the possible and the impossible. The latter (for example a man with two heads, a sea of mercury, a sapphire mountain) were only mental formations, pure producers of our imagination; they were not things. Only possible *ma‘dumat* (about which we shall speak below) were things.

Ma‘dumat were differentiated by type, so that a definite type corresponded to each kind of empirically existing thing. But in that respect the following was essential: each type of *ma‘dumat* was infinite, but only a finite number of them came into existence at any given moment. Furthermore, *ma‘dumat* were not only differentiated by type but also numerically as individuals (which was more essential for understanding them). The Mu‘tazilites endowed them with nearly all the qualities of concretely existing things. In their view they were characterised in the state of not-being by attributes like substantiality, accidentality, whiteness, blackness, etc. Jubay and his son Abu-Hashim, Baghdadi reported, considered that any characteristic that a thing which had a beginning in time possessed in itself, or as something representing a definite kind or genus was already inherent in it in the state of not-being.[17] Khayyat, who ascribed every possible quality to a *madum* except phenomenal existence, came to extreme conclusions on this matter. Subsequently his school became called *madumiiya,* i.e. defenders of the doctrine of *madum.*

At the same time *ma'dumat* did not have a number of spatial and temporal characteristics. Thus Khayyat himself did not admit that a *madum* was movable, although he considered that a body was already a body in a state of not-being. Other Mu'tazilites refused to call a *madum* a body because a body, from their point of view, was something composite with length, breadth, and depth.[18] That witnesses to the metaphysical status of a *madum* in their ideas. The metaphysical nature of *ma'dumat* evoked associations with Plato's world of ideas (Gr. *eidos*). In actual fact, the Mu'tazilite thesis that *ma'dumat* were immobile or not-moving (*thabita*), and outside the mind (i.e. that they possessed noumenal being), brought them close to Plato's ideas in the generally accepted understanding. of them. But there was an essential difference; for Plato ideas were things of a kind, while for Mu'tazilites a *madum* was a concrete, single thing regarded from a metaphysical standpoint, i.e. abstracted from its spatial and temporal relations. *Ma'dumat* were an infinite, diverse world taken outside space and time. The world functioned for them, Jalabi (d. 886 A.H./1481-2) wrote, as an aggregate as it were of immobile *ma'dumat.*[19]

The world of *madums* was homologous to the sense-perceived world. It was in eternity, having neither beginning nor end in time. But it was by no means a world of archetype ideas initially created by God, who then, gazing at them, created empirical things, as theistic exemplarism taught. *Ma'dumat* were not created essences. Furthermore, in the view of Mu'tazilites, Allah had not created the world in accordance with any previously existing models (*ala mithalin sabiqa*).[20] In this picture of the universe the creation of things was nothing other than their transition from their eternal precedence to the phenomenal world.

Such was the conception of latent pre-existence (*kumun*) put forward by the Mu'tazilite Nazzam, who suggested that God created the universe in one piece (*jumlatan*) and all at once (*duf'atan wahidatan*); he created men, animals, minerals, and plants at one and the same time, so that the creation of Adam did not precede the creation of his progeny, and the creation of mothers did not precede the creation of their sons. The creation concerned here was a metaphysical act whose sense lay in representing all things, past, present, and future as gathered together in one point where they latently existed together. Things constantly manifested themselves from this latent state, and the metaphysical point developed in space and time. The single-act creation thus proved to be a continuous process; at each moment of time God created the universe with everything that was in it, without annihilating it or reconstructing it.[21]

Allaf's doctrine of the creation of the world as an accident that had no substratum (*la fi mahall*) was similar to this understanding of creation. Creation without a substratum was also a metaphysical act. It signified, Ghazali explained, that it had to do equally with all things.[22]

All three doctrines—about *madum*, latent pre-existence, and extra-substratum creation—thus essentially represent the same type of construction. Each of them embodies, in its own key, the idea of creation as a metaphysical act to which the physical, spatial-temporal development of the cosmic process corresponds.

In constructing these schemes Mu'tazilites stressed in every way possible the independence of the processes taking place in the world from the volitional intervention of God. The world of *ma'dumat* was absolutely not dependent on Allah. Genera and species of things and their substantiality and accidentalism were already distinguishable in the state of not-being and did not depend on the actions of the Maker and the power of the Almighty, and *ma'dumat* themselves were in need of the Almighty only in relation to being.[23] According to Ibn al-Jawzi, Abu-Ali al Jubbay, his son Abu Hashim, and their followers among the Basra school of Mu'tazilites said that a *madum* was a thing, essence, substance, whiteness, yellowness, redness, and the Creator was unable to make either essence essence, or accidence accidence, or substance substance; He was able only to develop essence from not-being into being.[24] Nazzam also stressed that, in the doctrine of the latent pre-existence of things it was only a matter of forerunner and consequence in their appearance from their hidden places, without creation of any kind. In general, he said, God could not add anything to creations or take anything from them.[25] Allaf repeated Nazzam; in his opinion the power of the Creator did not go beyond his giving the 'non-existent' (*madum*) existence, after which Allah could do absolutely nothing, neither create ants nor bring a dead mosquito back to life, or even stir a leaf on a tree.[26]

THE PANTHEISTIC ORIENTATION

Two tendencies—the theistic and pantheistic—are usually met in comprehension of the relation of the Creator and the created, of God and the world. Characteristic of theism is the idea of God as the absolute who created the world from nothing during a certain time, and who rose above the world he created and freely interfered with the course of natural and social processes. This freedom of action is associated with the existence of God's will, non-rational and sometimes irrational. In that sense the God of theism is a personality.

Theism develops, as a rule, within the context of theology, which puts forward a more or less rationalist interpretation of God. The existence of a rational principle, reason, in God is recognised in theological doctrines, but together with it a volitional, irrational principle is often placed over and above it. The relation between the two is often an isomorphic, parallel one between reason and belief in a given doctrine. Insofar as reason or intellect begins to predominate over faith and to subordinate it to itself and, consequently, the rational principle in God gains the upper hand over the irrational, theology draws closer to philosophy, and the theistic understanding of God yields place to a pantheistic view of Him. In pantheism God's reason becomes a synonym for the laws of the world, and God Himself a synonym of its wholeness and unity.

The idea of the immanence of the divinity in the world is also characteristic of primitive, mythological thinking and of primitive forms of religious consciousness, which is expressed in particular in cults of natural phenomena and creatures, idolatry, etc. In its more developed forms, especially in the revelational, monotheistic creeds, religion, which is oriented primarily to that sort of consciousness of the broad masses, with their inherent primitive-naive naturalism, cannot rid itself of such a pantheism. Recurrences and relapses of it can be found in the Old Testament stories. The idea of transcendent divinity is manifested much later, in the Palestinian interpreters of the Book of Genesis, in the teaching of Philo of Alexandria, and parallel with it in the system of the Neoplatonists. In Christianity the primitive immanentism of the Old Testament, reinforced by Greek pantheism, was not completely ousted by the idea of transcendentalism, but survived in it in the context of trinitarian and Christological dogmas.

These two opposing ideas also exist side by side in Islam, though it, while denying these dogmas, makes a certain turn toward affirming the transcendentalness of God: 'There is nothing/Whatever like unto Him'.[27] But the closeness of God to the world—and only such affinity is close to the understanding of the masses—is quite distinctly expressed not only in many places in the Koran, where God is endowed with especially anthropomorphic features (hand, eye, etc.) but also in those verses in which it is said

57 : 3 He is the First
and the Last
The Evident
And the Immanent;
6 : 3 And He is God
In the Heavens
And on earth.
43 : 84 It is He Who is God
In heaven and God on earth...
58 : 7 Seest though not that
God doth know (all) that is
In the heavens and
On earth? There is not
A secret consultation
Between three, but He
Makes the fourth among them,—

Nor between five but
He makes the sixth,—
Nor between fewer nor more,
But he is in their midst,
Wheresoever they be.
50:16 ... for We [God]
Are nearer to him [man]
Than (his) jugular vein.[28]

The naive immanentism of mass consciousness found its extreme expression in the cult of saints, which became a marked phenomenon of Moslem religious life especially after the tenth century, and frequently ousted the cult of God; in the doctrines of Shi‘ite-Ismailites, Fatimids, and Druses, who go as far as to deify their imams; and in various doctrines of spokesmen of non-speculative Sufism, inspired by the possibility of dissolution in God and union with him, and so on.

Theism, which insists on elevating the personality of the absolute God above nature and man, and on His transcendentalism, is opposed to pantheism of that kind. In Islam, and above all in Sunnism, this transcendentalism was often interpreted in spatial terms, when God was depicted as being only in the heavens but not at all on earth. But even in Sunnism naive immanentism coexisted along with theistic transcendentalism, and often took its place as an ideology supported by the official authorities in certain regions of the Moslem world.

In philosophical pantheism, in which God symbolises the world entity, God is not only immanent in the world but also transcends it, or more exactly is not immanent in it and not transcendent to it. But the transcendentalism here is fundamentally different from that in theism. It is the transcendentalism of the whole to its parts and properties, or the world taken in its unity and wholeness to the world as a plurality, as an aggregate of chance, single things; the intelligible, metaphysical world to the phenomenal, empirical, physical world regarded from the standpoint of its development in space and time. It was also this immanent transcendentalism characteristic of the doctrine of Jahmites and Mu‘tazilites about God and His relation with the world.

The Jahmites, and after them the Mu‘tazilites, denied

God any anthropomorphic characteristics, in the spirit of apophatic (negative) theology. God, they taught, was one; there was nothing like him; he occupied neither place nor time; he was unlike anything in creation[29]. Negation of a similarity between God and creations in any respect whatsoever was one of the most important aspects of the Mu'tazilites' doctrine of monotheism, of the transcendental nature (*tanzih*) of God. But on closer examination, as their opponent Ibn Taymiyya showed, this transcendentalism of the divinity proved to be a real immanentism. They said that God was above limits, places and sides but implied that He was not in the heavens, did not sit on a throne, but was everywhere; they said that God could not be the substratum for transient events, but implied that God had no actions depending on his will and power, there was neither making nor the made, nor creation and created, but the created was the Creator himself and what was made was the Maker himself. By affirming the transcendental nature (*tanzih*) of God, depriving Him of all characteristics of finite creations, and putting Him above such, the Jahmites and Mu'tazilites thus identified God and the world whole in fact. God, whom they apophatically converted into a nothing of sorts, proved in fact to be everything. As Ibn Taymiyya reported, *mutakallims* and the theorisers among the Jahmites revered nothing, but the mass of them revered everything.[30]

A pantheistic orientation to answering the question of the relation of God and the world was also displayed in the Mu'tazilite doctrine of the identity of the divine attributes both with each other and with the divine essence. In identifying the attributes with one another the Mu'tazilites strove to reduce them all to one, i.e. to 'knowledge'. The coincidence of all the attributes, including will and power, with knowledge in fact signified subordination of the irrational-volitional principle in God to the logical-rational one. Thus, in the opinion of Aswari, if Allah knew that he would create something, he was not able not to do so; if he knew that some man would die at the age of 80, he could not kill him before that time or leave him alive for even an instant after it. As a result there remained to God a single attribute in the final analysis, viz., knowledge, identical with the divine essence. God's knowledge, in Allaf's view, was God. According to the Mu'tazilites the divine will was identical with the world on the one hand, and with the divine essence on the other, which implied the identity of God and the world.[31]

The identification of God and the world was also reflected in the teaching of a number of Mu'tazilites about the nature (*tab', khilqa, khassiyya*) of bodies with which Allah could not help coordinate his actions. Thus, according to Muammar, if a body by its nature would not accept a certain colour, it might happen that Allah would endeavour to colour it in this colour but it would not be coloured. And in general, it was impossible, Nazzam claimed, for a substance to do that which by its nature it did not do, and for the Creator to force it to act otherwise than it acted according to its nature.[32] By an argument 'from perfection' Mu'tazilites stressed the identity of God's 'actions' with processes taking place in the universe; if God could create another world, that world would be absolutely identical with the existing one; for God was the experienced craftsman who made everything perfectly!

The Mu'tazilite conception of divine justice, which constituted the second of their five fundamentals, was aimed against the religious-theistic idea of a creator absolutely free in his deeds. According to their argumentation it was impossible to think of one act of the divinity that would not satisfy the requirements of justice. The omnipotence of God was limited by this requirement, from which He could not be free and which he was powerless to alter. Allah had of necessity to be just, and could not violate what he was obliged to do.[33] God was obliged to make with his creations only what suited them most (*al-aslah*), and not to dispose of them according to his free discretion.

Anti-theistic precepts and pantheistic motifs were retained in Ash'arite *kalam*. Shahrastani, polemising against theists who affirmed the transcendental nature of God in the sense of His remoteness from the world in both time and space, stressed that God was above space and time, so that it was impossible to imagine that there was a vacuum separating the being of the All-Highest from the world, just as it was impossible to imagine a time separating His being from the world, just as it was impossible to imagine a time separating His being from the world. God, he said further, was not within the world, nor outside it. Furthermore, there were more verses of the Koran that indicated God's closeness to the world than ones that indicated His remoteness. Shahrastani interpreted the verse

> He is the First
> And the Last,
> The Evident
> And the Immanent[34]

in the sense of the actual indistinguishability of God and the world in space and time, in the manner characteristic of the pantheism of the Moslem Middle Ages. Ibn Rushd referred to the immanency of God to the world in the Ash'arite *kalam*; according to him the Ash'arites professed that Allah is a living, knowing, willing, hearing, seeing, powerful, speaking essence. Allah exists in continuous existence connected with everything and in everything.[35] Isfahani expressed the pantheistic view of God in a clearer form. In his opinion knowledge of God was also the being of concrete things. On the other hand, he considered, the essence (*zat*) of God and his knowledge, were not distinguishable in themselves, but depended on our mode of examination (*bi-i-i'tibar*)[36]. Thus, in his essence God was identical with the being of the world.

The Ash'arites, following the Mu'tazilites, subordinated the irrational principle in God to the intellectual principle, will to knowledge, in the spirit of the pantheistic solution of the problem of the divine attributes. The divine will, they stressed, was neither full freedom nor absolute arbitrariness. The divine will was limited by the imperatives of reason. God, according to Ash'ari, could only want what it was permissible to want. His will was subordinated to knowledge; the will endowed with being only the essence of that whose being was known to God. On that fundamental point the opinions of Ash'arite *mutakallims* and *falasifa* coincided, as Shahrastani pointed out: what the *falasifa* called the thinking of God, he said, Ash'arites called perennial knowledge, and what the philosophers called prevision, they called eternal will. And just as prevision was based on knowledge, from the *falasifa*'s standpoint, so from the Ash'arites' point of view will was directed to the object of the willing in accordance with knowledge. There was no difference between the one doctrine and the other.[37]

Whereas Mu'tazilites limited divine will by their doctrine of the identity on God of knowledge, will, and power, the Ash'arites reached the same end by putting forward a conception of the eternity of divine knowledge and of the divine will. In particular Ash'ari and Baqillani suggested that if God, say, knew about the forthcoming death of a certain person at a definite moment, he could no longer bring forward this moment or postpone it. God was limited in his actions to no less a degree by his own eternal will. Thus, for example, He could not wish something different from a non-believer from what he wished in eternity. Everything was programmed, as it were, in the eternal will and predetermined. Ash'ari and his followers taught that it was impossible for the world to be other than it was, because it was impossible for the eternal will to become different and have its essence. They also said the same about the parts of the world, and about the states of motion and rest, about bodies and accidents.[38]

God's eternal will was a kind of metaphysical point, the development of which was linked with realisation of things in space and time. According to Ash'ari, the specification in regard to time, magnitude, and form was precisely that what was realised through the will. The absolute invariance of the eternal will predetermined the necessary character of the phenomena of the world and of the processes taking place in it. The single thing or single event, taken by itself, had a contingent, not necessary character. But if the single, isolated thing was examined in relation to the eternal will and to eternal knowledge, it ceased to be existent-possible and became existent-necessary. According to Shahrastani, when a possible thing was realised at a certain moment and in a certain form, it must necessarily have been caused in just that way, because if the Principle endowing being knew that it would get a concrete being at a given moment and in a given form, and wanted that, it would necessarily have to be realised.[39]

In the ideas of *mutakallims,* both Mu'tazilites and Ash'arites, the world was rationally constructed, which served as evidence of the wisdom of the Creator and the existence of his knowledge. In the view of *mutakallims* the following verses of the Koran spoke of the perfection of the universe:

67 : 3 No want of proportion
Wilt thou see
In the Creation
Of (God) Most Gracious.
So turn thy vision again:
Seest thou any flaw?
32 : 7 He who has made
Everything which He has created
Most Good ...
27 : 88 (Such is) the artistry of God,
Who disposes of all things
In perfect order ...
21 : 16 Not for (idle) sport did We
Create the heavens and the earth
And all that is between![40]

The pattern and regularity in cosmic phenomena and processes were something given for *mutakallims* which did not need proof. But the teachers of *kalam* disagreed among themselves in their interpretation of the character of the determinateness of the world, in understanding of the nature of causal relations in cosmic and social processes.

The Jahmites held to a strict determinism, fatalism of a pantheistic type, in which God was the Creator of everything that happened in the world, both in nature and in society. It was precisely Allah the All-Highest, they said, who created actions in man just as he created them in inanimate objects. Actions were ascribed to man only allegorically, on the analogy of how they were ascribed to inanimate objects, when one said a tree bore fruit, water flowed, a stone moved, the sun rose and set, the sky was covered by clouds and it began to rain, the earth trembled, and put out shoots, and so on. Divine retribution and punishment were coercion and compulsion (*jabr*), just as all human actions were coercion.[41] Everything was determined by divine knowledge so that there was no place for alternative actions, or for freedom of choice either for God or, all the more, for man. The position of Jahmites was usually qualified as extreme fatalism (*jabriyya*).

The question of the maker of human actions already had a political sense among its sources, thus going beyond theological ethical-religious discussions of man's moral responsibility for the deeds performed by him. The Omayyad Caliphs, for instance, justified their despotism precisely by fatalism. The Mu'tazilites, being one of the forces opposed to them, differed from Jahm on the question of the 'creator' of human actions, distancing God to the maximum from the social sphere. They considered man the creator of his own deeds, both good and bad. Man's capacity to make things they depicted as something delegated by God to him. Allah, they said, could endow his slaves with a capacity to do everything they knew how to do.[42]

Ash'ari and his followers developed a conception of *kasb* (acquisition). Following the Jahmites they considered God the creator of everything that happened in the world, including human actions. Man, however, endowed with will and freedom of choice, was qualified not as the creator of his deeds but only as the doer of them (*muktasib*). Being free in his choice he bore moral responsibility for his actions. But whereas Ash'ari denied any influence of man's capacity in the creation of the corresponding actions, his immediate followers like Baqillani and Juwayni inclined more to the Mu'tazilites' doctrine. By differentiating being as such and its concrete modes (movement, for example, and its concrete forms like walking, standing up, or sitting down), Baqillani referred the creation only of being to God, while he ascribed the shaping of this being and its concretisation to man. Juwayni went further, recognising in man a capacity of influencing 'being' itself. In his opinion action was based in its being on human capacity; capacity was based on another cause, so that capacity related to it as action to capacity, just as one cause was based on another right to the cause of causes, which was the self-sufficing creator of causes and their consequences.[43]

The problem of the character of the action of secondary causes was a subject of discussion among *mutakallims*. Some of them, like Nazzam, Jahiz, Mu'ammar, and other adherents of the doctrine of the nature of bodies, recognised the action of secondary causes and endowed them with a producing force in the sense that a cause from their standpoint produced an effect. Bishr ibn al-Mu'tamir and his followers taught something else about the generation (*tawlid*) of things one from another. Such was the position of several Ash'arites, in particular Juwayni. But among Mu'tazilites there were those who denied producer causality, recognising only a functional dependence between cause and effect. Most Ash'arites inclined to that opinion. This group of Mu'tazilites either denied the nature of bodies or considered it created by God. In denying natural, producing causality they treated order, regularity, and pattern in the world as a habit or custom (*'ada*) introduced by God. But this custom was in no way inferior to natural law, either in constancy or in objectivity. For *mutakallims,* Moses Maimonides witnesses, existents had certain forms, sizes, and modes, that did not alter and were not transient, for example, 'God observes the invariable custom of not permitting that the colour black should be produced except when the garment is dyed with that hue'.[44]

Ash'arites, true, postulated the admissibility of the existence in the world of other forms, sizes, motions, etc. Any thing and its properties were not necessary in themselves but were chance and contingent. God therefore could in principle create things with other characteristics than those they had; thus, for example, for fire to be cold and water burning (but in that connection, understandably, the corresponding names would have to be changed). Such possibilities, however, were only abstract, imaginary, or rather fanciful assumptions that were not realised. It was a matter of assumptions, such as that a man could tear his throat out, though we knew that he would not do so since he possesses reason. Another example, a king did not usually ride through a town other than on horseback, and no one ever saw him in another form, but it could be mentally supposed that he could walk through the town on foot.

God could thus destroy the usual order of things. But (1) God's power was limited by his knowledge so that, according to Ash'ari, that which differs from the content of God's knowledge (*malum*) was within

His power (*maqdur*), but was not realised (*muhal al-wuqu'*).[45] (2) Everything was already predetermined in the divine eternal will, so that God would not interfere more in the predetermined course of things. The guarantee of God's not disrupting the customary order of the world was that He created the knowledge in us that He would not do so, because the customary course of things again and again confirmed in our minds the experience introduced from our past habit, the idea of its permanence and regularity.[46]

The principle of admissibility (*tajwiz*) in the teaching of *mutakallims* is very far from the indeterminism ('this whirl of all things', as Hegel put it[47]), which is often ascribed not only to Ash'arites on the grounds of this principle, but also to *mutakallims* as a whole. In *kalam,* including the Ash'arite, the world order was founded on an indestructible, firm foundation that was identical with the divine knowledge. The rationality of the universe, in turn, was a guarantee of the possibility of knowing it.

NOTES TO CHAPTER 3

[1] *The Holy Bible. Apocryphal/Deuterocanonical Books.* The Wisdom of Solomon, 11 : 17 (Collins, New York, 1973), p 45.

[2] *Ibid.* The Second Book of Maccabees, 7 : 28.

[3] See: *The Holy Qur-an,* verse 52 : 35. In Abdullah Ali's translation this verse reads: 'Were they created of nothing/ Or were they themselves/The creators'.

[4] *Ibid.,* verses 6 : 101 and 2 : 117.

[5] *Ibid.,* verses 11 : 7 and 41 : 11.

[6] Ibn Rushd. The Decisive Treatise. In: George F. Hourani. *Averroes on the Harmony of Religion and Philosophy* (Luzac & Co., London, 1961), p 57.

[7] Al-Ash'ari. *Maqalat al-islamiyyin* (Verlag von Franz Steiner, Wiesbaden, 1980), pp 358-360.

[8] Al-Juwayni. *Ash-Shamil fi usul ad-din,* Vol. I (Dar al'arab, Cairo, 1960-61), p 63.

[9] Asi-Shahrastani. *Nihayat al-igdam fi 'ilm al-Kalam* (Martabat al-Muthanna, Baghdad), pp 17-18.

[10] Ibn Rushd. *Op. cit.,* p 56.

[11] See: Al-Maturidi. *Op. cit.,* pp 4-5.

[12] See: Ash-Shahrastani. *Op.cit.,* p 18.

[13] See: al-Baghdadi. *Usul ad-din* (Matba'at ad-dawla, Istanbul, 1928), p 71.

[14] Ash-Shahrastani. *Op.cit.,* p 169.

[14] Ash-Shahrastani. *Op.cit.*, p 169.

[15] Simon van den Bergh. *Averroes' Tahafut al-Tahafut (Incoherence of the Incoherence)* (Luzac & Co., London, 1954), Vol. 1, p 62.

[16] See: Ibn Hazm. *Op. cit.*, Vol. IV, p 202.

[17] See: Al-Baghdadi. *Al-Farq bayna-l-firaq* (Subayh Press, Cairo, n.d.) p 179; see also: Al-Jurjani. *Op.cit.*, Vol. I, pp. 298-315; At-Taftazani. *Sharh al-Maqasid,* Vol. I, pp 82-90; Ash-Shahrastani, *al-Milal,* Vol. I, p 78.

[18] See: Al-Baghdadi. *Op. cit.*, pp 179-180.

[19] See: Al-Jurjani. *Op. cit.*, p 314.

[20] See: Al-Ash'ari. *Maqalat,* p 158.

[21] See: Al-Khayyat. *Op. cit.*, p 44.

[22] See: Al-Ghazali. *Tahafut al-falasifa* (Dar al-ma'arif, Cairo, 1980), p 129.

[23] See: Ibn al'Jawzi. *Talbis Iblis,* p 83; Ash-Shahrastani. *Nihayat al-iqdam,* p 155.

[24-26] See: Al-Khayyat. Op.cit., p 44; Ibn Hazn. *Kitab alfisal,* Vol. IV, p 146.

[27] *The Holy Qur-an,* verses 42/11.

[28] *Ibid.*, verses 57 : 3; 6 : 3; 43 : 84; 58 : 7; 50 : 16.

[29] Al-Ash'ari. *Maqalat,* pp 155-156.

[30] See: Ibn Taymiyya. *Muafaqat sahih al-manqul li-sarih al-ma'qul* (Cairo, 1328 A.H.), Vol. I, pp 6-10; *Idem. Majmu'at ar-rasa'il wa-l-masa'il* (Dar al-Kutub al-'ilmiyya, Beirut, 1983), Vol. I, pp 83-84.

[31] See: Al-Khayyat. *Op. cit.*, pp 23, 80; Ibn Hazm. *Kitab al-fisal,* p 150; Al-Maturidi. *Op. cit.*, p 86.

[32] See: Ash-Shahrastani. *Al-Milal,* Vol. I, p 46; Al-Khayyat. *Op. cit.*, p 41.

[33] See: Abd al-Jabbar. *Sharh al-usul al-Khamsa, p 132.*

[34] *The Holy Qur-an,* verse 57 : 3.

[35] S. van den Bergh. *Op. cit.*, p 61.

[36] See: Al-Isfahani. *Op. cit.*, p 179.

[37] See: Ash-Shahrastani. *Nihayat al-iqdam,* pp 40, 43; al-Ash'ari. *Kitab-al-luma'*. In: R.J. McCarthy, *Op.cit.*, p 33.

[38] See: Ibn Abi-l-Hadid. *Sharh Nahj al-balagha* (Cairo, 1959), Vol. V, p. 163; see also: Al-Ash'ari. *Kitab al-ibana,* p 58; Al-Baqillani. *Op. cit.*, p 332; 'Abd al-Jabbar. *Sharh al-usul al-khamsa,* p 378.

[39] See: Ash-Shahrastani. *Nihayat al-iqdam,* p 21; idem. *Al-milal,* Vol. I, p 94.

[40] *The Holy Qur'an,* verses 67 : 3; 32 : 7; 27 : 88; 21 : 16.

[41] See: Ash-Shahrastani. *Al-Milal,* Vol. I, p 87.

[42] See: Al-Ash'ari. *Maqalat al-islamiyyim,* p 566.

[43] See: Ash-Shahrastani. *Al-Milal,* Vol. I, pp 95-99;
idem *Nihayat al-iqdam,* pp 72-79.

[44] Ibn Maymun. *Dalalat al-ha'irin* (Ankara, 1974), pp 207, 211.

[45] Ash-Shahrastani. *Al-Milal,* Vol. I, p 96.

[46] Al-Ghazali. *Tahafut al-falasifa,* pp 245-246.

[47] Cited from Hegel's *Lectures on the History of Philosophy,* Vol. III, translated by E.S. Haldane and Frances H. Simson (Routledge & Kegan Paul, London, 1968), p 32; see also: Moses Maimonides. *More Nevochim* (Basle, 1629), pp. 152-155; p 33.

4

Atoms and Continuum

Finitism, the existence of a limit to the divisibility of bodies belong to the 'nice problems' of *kalam*. The disputes about 'indivisible particles' that developed among *mutakallims* themselves and between finitist *mutakallims* and their opponents were a continuation of the corresponding discussion in antique thought.

These disputes had started in *kalam* at the beginning of the ninth century A.D. Following the Shiite *mutakallim* Hisham ibn al-Hakam, the Mu'tazilite Nazzam and his successors taught the division of bodies to infinity. Allaf, and many other Mu'tazilites, objecting to them, defended a thesis about the existence of a limit of divisibility, of 'indivisible particles'. Some Mu'tazilites, including Abu-l-Husayn al-Basri (d. 1044-5), the head of the Mu'tazilites in Baghdad, occupied a neutral position as regards 'indivisibles'. There was a similar divergence among Ash'arites. While Ash'ari and Baqillani held atomistic views, Juwayni and Fakhr ad-Din ar-Razi preferred to refrain from joining either the finitists or their opponents. This last tendency was characteristic on the whole of the late *mutakallims*. According to Moses Maimonides, most of the late *mutakallims* supposed that their predecessors had tried in vain to prove the existence of the atom.[1] As a rule Maturidites and *mutakallims* among the Qarramites did not accept atomism. The theologians of Transoxania *(Mawara-n-nahr)*, who considered atomism an unsubstantiated doctrine borrowed by Ash'arites from the early Mu'tazilites, were seemingly under the influence of Maturidites.[2] The traditionalist theologians, including Ibn Kullab (d. 854), Ibn Hazm, and Ibn Taymiyya had a negative attitude to the *mutakallims*' atomism.

THE PLACE OF ATOMISM IN THE *MUTAKALLIMS'* DOCTRINE

The atomist *mutakallims'* denial of the divisibility of bodies *ad infinitum* was due above all to the epistemological difficulties connected with accepting infinitude, especially actual infinitude. For antique and mediaeval thinkers the categories 'how much', 'equal' and 'not equal' were inapplicable to infinity because all infinities were equal to each other. In their notions, furthermore, the infinite sum of very small quantities (expressed in modern language as infinitesimal), or quantities that were steadily being lost in a definite ratio (2 : 1, for example), was always infinitely great. It seemed impossible to these thinkers to pass infinity.

The *mutakallims* and other thinkers of the Islamic Middle Ages were acquainted with the difficulties arising with both affirmation and denial of the infinite divisibility of body. In particular they knew Aristotle's famous argument about divisibility in the treatise *On Coming-to-Be and Passing Away,* in which he showed that division to infinity changed a body and, at the same time, the whole universe, into transparent dust, into a certain haze, and consequently into a mirage. From that it followed that the division must stop at some point. The particles so obtained could not be bodies 'since then there will be something which has not been divided, and it was divisible throughout'. On the other hand, they could not be points since 'it is absurd that a magnitude should be composed of things which are not magnitudes'.[3] In denying infinite divisibility the atomist *mutakallims* would have had to allow for such difficulties, and also for the criticism of antique atomism and its two main schools (the Pythagorean-Platonic and the Democritean-Epicurean). But their attention was not focused on building a universe on a foundation of the doctrine of atoms, and on explaining the properties of bodies by the characteristics of the atoms composing them, but was centred mainly on the thesis of the existence of a limit of divisibility.

The discussion of 'indivisibles' was limited in fact to the context of natural philosophy. The fact that both within *kalam* as a whole and among the spokesmen of one and the same school, there was no unity on the question of the limit of divisibility was evidence in itself of the absence in the *mutakallims*' doctrine of some necessary, inner link between the atomistic problematic and the ideological conceptions common to the school, not to mention *kalam* as a whole. As a rule there was no such link in the systems of the individual *mutakallims.*

In developing atomism *mutakallims* did not employ it to substantiate the doctrine of the continuous creation of the world by God—for the dynamic teaching was developed in its most consistent form precisely in the bed of the anti-atomist current (by Nazzam and his followers). They did not strive for a fragmentation of matter into tiny, isolated particles, in opposition to which there arose the continual empire of God—the finitism of the atomist *mutakallims* did not presuppose the discreteness of bodies and the existence of an empty space or void between atoms. They did not endeavour to deny causality and promote theistic voluntarism—Mu'ammar, a militant adherent of determinism in nature, was one of the first atomists. They did not assert the absolute omnipotence of Allah— quite the contrary, the existence of a limit to the divisibility of a body presupposed the impossibility of its further division, or rather threw doubt on divine omnipotence. The opponents of the *mutakallims*' atomistic doctrine, like Ibn Hazm, drew attention to that.[4]

In fact the thesis of the existence of a limit to the divisibility of a body was directly linked, for Allaf, the founder of the atomistic doctrine in Mu'tazilite *kalam,* with a thesis of the existence of a limit to divine knowledge and power. Allaf even quoted verses of the Koran in support of this.[5]

6 : 80 My Lord comprehendeth
In His knowledge all things...
2 : 29 And of all things
He hath perfect knowledge.

41 : 54 ... It is He
That doth encompass
All things!
72 : 28 ... and /God/ takes account
Of every single thing.

Only the finite could be taken account of and encompassed, he added. Thus the difficulties associated with the localisation and knowing of actual infinity led Allaf both to a limitation of divine power and knowledge and to an ending of the division of bodies. It was a different matter that he and his followers, in the context of a polemic with those who saw a restricting of divine omnipotence in the recognition of 'indivisibles', demonstrated that it was the denial of God's possibility to stop the division of a body at a particle that was not further divisible which led to such a restriction.

Lack of attention to this context was characteristic of the theological interpretation of the genesis of the atomist problematic in *kalam*, which had come up against the following paradox, viz., how could the Doctors of *kalam* adopt the ontological principles of one of the most materialist and atheistic doctrines of antiquity—that of Demokritos and Epicurus—and erect an exclusively theistic system (from the angle of this interpretation) on the basis of them? Propositions were voiced in reply that *mutakallims* did not know the real doctrine of the Greek atomists, that the atomic philosophy of Demokritos and Epicurus had come down to them in distorted form (in a mystical alchemist envelope), that when the *mutakallims* became acquainted with the Greek legacy atomism was already associated with indeterminism, and so on. But in fact the Doctors of *kalam* must have disposed of quite rich, exact information about Greek atomism (in particular with pseudo-Plutarch's *De Placitis Philosophorum* and Aristotle's *Physics* and *Metaphysics*, already translated into Arabic in the early ninth century), and about the atheistic trend of the philosophy of Demokritos and Epicurus (denial of a creator, of another world, and so on).[6]

THE ATOM AND ITS PROPERTIES

By distinguishing between physical and mathematical divisibility, atomist *mutakallims* stopped the process of division at the smallest bodies (*aqall al-ajsam*) corresponding to the primary bodies or atoms of Demokritos and Epicurus, and to an even greater extent to the minimal lines of the Pythagoreans and Platonists. The parts, they said, were divided down to two after which, if one wanted to divide further, division annihilated them; if it was wanted to imagine one of them, it was not discovered in imagination (*wahm*); when it was wanted to distinguish them by imagination or in some other way, nothing else was found than their disappearance.[7] The first *mutakallims* employed two terms as a rule in order to designate the limit of divisibility, the atom: 'indivisible part (particle)' (*al-juz' allazi layatajazza'*) and 'indivisible sole substance' (*al-jawhar al-fard allazi layanqasim*). Sometimes the terms 'part', 'sole substance' or simply 'substance' were used as abbreviations. Later these terms became established in the abbreviated form.

An atom in itself had no independent existence. It existed only together with other atoms. Thus, said Ash'ari, whoever asked about one of them thereby asked about the rest; an atom did not exist separately.[8] Certain atomists, it is true, assumed the isolated existence of a separate atom, but they implied by that a mental, imaginary existence, and not a real one. In that respect the *mutakallims*' 'parts' were similar not to Demokritos' 'atoms' but to Epicurus' 'ameres' (mentally distinguishable in atoms but not separable from them) and to the monad-points of the Pythagoreans and Platonists.

According to some doxographers the *mutakallims*' atoms absolutely lacked magnitude (*kamm*), and did not have body, nor length, breadth, or depth. But they were neither geometrical points nor 'mental' monads. The atomists of *kalam*, like the classical atomists, made the minimum a special extension intermediate between corporeality and absolute non-extension.

Epicurus, allowing for the criticism of the anti-atomists, who pointed out that atoms were either bodies, and then they were divisible, or points from which it was impossible to form a body, or continuum, put forward a third possibility: 'ameres' occupied an intermediate position between primary bodies and points, 'measuring magnitude in their own way'. The Pythagoreans and Plato came to a similar solution, but earlier. From Plato's point of view (according to Aristotle): '...extension is different from the magnitude: it is what is contained and defined by the form, as by a bounding plane.[9] The discrimination of magnitude and extension fully corresponded to the Greek philosophical tradition of not including the element or principle of things in their number (in particular, unity was not considered a number since it was the principle of counting).

The atomists of *kalam* constructed an extension of 'indivisibles' in the same spirit, but in a more clear-cut form. The atom, in their opinion, lacked corporeality but occupied a place in space (*hayyiz*), possessed a certain extension (*imtidad*), magnitude (*miqdar*), volume (*hajm*), area (*masaha*), etc. Some Mu'tazilites, for example, gave the atom extension; those from Basra considered it necessary for each atom to have a certain area; Ash'arites taught that an atom had area, magnitude, and volume.[10] As for the Mu'tazilites of the Baghdad school, they, wanting even more to stress the difference between microscopic and macroscopic extension, refused to characterise the atom in itself as extension—extension could only be attributed to it in the composition of a body. Ash'ari cited the opinion of several Baghdad Mu'tazilites that when an atom was joined to another atom, each of them would be a body; but when they were separated neither of them would be a body.[11] That also corresponds to the testimony of Nisaburi that in the opinion of Kabi, the head of the Baghdad Mu'tazilites, it was impossible to say of an atom that it occupied a place in space or had area, until it was joined to another atom. In fact, as Nisaburi noted, the discord among the Mu'tazilites of the two schools on the extension of an atom did not go beyond the context of differences in mode of expression, because there was no disagreement among both schools that an atom could exist without occupying a definite place in space.[12]

The atom was thus not a body, did not have length, breadth, and depth, but extended in its own way, and its extension was the principle of extension in general, the principle of corporeality. When Mu'tazilites said (Nisaburi wrote in their name) that an atom occupied a place in space (*mutahayyiz*), they implied that, thanks to that, atoms increased in size (volume) when they were joined to one another.[13]

But what was the minimum number of atoms needed to form the smallest body? At the Mu'tazilite stage of the development of *kalam* atomists gave various answers, but as a rule built corporeality geometrically. Allaf, in particular, considered that six atoms were sufficient to construct a body—two atoms in each dimension. Mu'ammar and Jubba'i taught about eight atoms—two for length, two for breadth, while depth was formed by piling another four on them. Kabi built the smallest body from four atoms—three forming a triangle, the base of a pyramid, and the fourth constituting the apex.

Futi put forward an interesting construction. He built a body in two steps; first of all six atoms formed the side (*rukn*); then in the second stage the body was formed from six of these sides (molecules). Some atomists constructed the smallest body from seven atoms (one in the centre and the other six contiguous to it on six sides). The extreme views can be taken as those of Salihi, on the one hand, who identified atom and body, and, on the other hand, the standpoint of those atomists who refused to name a certain number of atoms needed to form a body, limiting themselves to stating that the number was finite.

At the Ash'arite stage of the evolution of *kalam* an idea prevailed of the smallest body as composed of two atoms, a notion which, according to Ash'ari, had previously been held by certain Mu'tazilites—Iskafi (d. 855) and several Baghdadis.[14] It has to be stressed once more that, in *mutakallims'* arguments about the formation of a body from atoms it was a matter of a purely mental, geometric construction and not of a real, physical process.

The doctrine of the classical atomists about the building of a continuum from indivisibles was developed further in the atomicism of *kalam*. The anti-atomists (in particular Aristotle) had, of course, pointed out that atoms excluded a continuum: they could not completely coincide with one another, otherwise they would merge, and they could not come into contact even partially since they had no parts. The atomists (Pythagoreans, Epicurus) spoke of a third possibility by which continuity was preserved, but in what way, it remained unclear. By drawing a clearer difference between physical and mathematical divisibility, the atomist *mutakallims* taught that an atom had six sides (corresponding to the positions or turns of Demokritos): top and bottom, right and left, front and back. In the opinion of the Basra Mu'tazilites, these sides (*jihat*) were something that pertained to the atom itself, and did not differ from it. Some Baghdad Mu'tazilites were also inclined to hold this view. Others, including Jubba'i and Kabi, considered sides accidents of the atom. Ash'arites like Shahrastani considered the sides or edges (*atraf*) unextended parts of an atom; they were, so to speak, geometrical parts of an atom and not physical components of it. In that sense an atom was indivisible although sides or parts could be mentally distinguished in it. By making contact on sides, which represented attributes or accidents or non-extended parts, atoms could form a continuum.[15]

An atom with six sides could come into contact with six atoms. Those atomists who denied the existence of different sides in an atom considered it capable of making contact with no more than one atom. Such was the view of Abu Bishr Salih ibn Abi Salih and Salih Qubba (d. 860), who claimed that one of the contacting atoms completely occupied the other because, if it were assumed that an atom could make contacts with more than one atom, the whole universe could fit into a fist.[16]

The problem of the form of an atom was linked with that of its extension, but it did not attract much attention among *mutakallims*. Evidence of that, in particular, is the absence of mention of it in Ash'ari's *Maqalat,* in which the dispute around the atom and its characteristics occupies considerable space. That circumstance was due to the point that—in contrast to the doctrine of Demokritos and his followers—the form of an atom played no role in the constructs of *mutakallims* when explaining differences in the sensory qualities of bodies. It was said in later works that the *mutakallims* agreed among themselves that in itself the atom had no figure or shape (*shakl*), but their opinions diverged as regards likening it to certain figures. Some likened it to a sphere, others to a triangle, and others to a square. The atomists of *kalam* saw the superiority of a square (or rather cubic) shape over a round one in squares being able to fit together so that there were no cracks or fissures between them.

This explanation of the preference for the square form expresses such a specified element of *mutakallims'* atomism as denial of the existence of void, which played such an exceptionally important role in the atomistic doctrine of Demokritos. Atoms did not exist outside a body in *kalam,* so that *mutakallims* had no need of a void to explain the motion, uniting, and separation of atoms. Kabi and other Mu'tazilites of the Baghdad school rejected the void even as an imaginary assumption. Other *mutakallims,* who assumed the existence of void, spoke of the existence of a void or space between bodies, but not between atoms.[17]

Mutakallims were also concerned with the problem of the weight (*thiqal*) of an atom. According to Ash'ari, for instance, every atom of itself had weight.[18] A body, too, had one weight or another depending on the number of atoms composing it.

The atomists of *kalam,* especially Ash'arites, regarded atoms as uniform, and identical with one another. They linked differences between them, as a rule, with accidents in them. Ash'arites, and together with them the Mu'tazilites Salihi, Iskafi, Salih Qubba, and others, endowed the atom with the property of being the bearer of all accidents (except compositeness). Other atomist Mu'tazilites, in particular Allaf, Futi, and Abbad ibn Sulayman, considered that an atom could only serve as the substratum of some quality or another in the composition of a body. According to Allaf, for instance, a separate atom could not be the vector of colour, taste, or smell until six atoms had been gathered together; then they formed a body and could be the bearer of these accidents.[19] It would be incorrect to interpret such statements, however, in the spirit of Demokritos' atomistic doctrine, i.e. in the sense that the accidents of a body arose from the union of atoms and disappeared when they were separated. It meant only that the uniting of atoms was a *sine qua non* (but not the cause) for the 'installation' of qualities in a body.

Mutakallims also discussed the question of the qualities of the individual atom, if its isolated existence could be mentally assumed. Certain Mu'tazilites (for example, Futi and Abbad ibn Sulayman) categorically denied the possibility of the separate existence of an atom. Even God, they taught, did not have the power to endow an atom with such existence. Other Mu'tazilites, who assumed the separate existence of an atom, disagreed among themselves as regards its qualities. From the standpoint of Mu'ammar and Allaf, for instance, an atom taken separately could only move, be at rest, and come into contact with other atoms, but lacked any sense-perceived qualities. Jubba'i considered that a separate atom could possess such qualities as colour, smell, and taste although it could not, as such, be a vehicle of life, knowledge, etc. It was characteristic of Mu'tazilites as a whole to deny that a separate atom could be a vehicle of life and the attributes associated with life. Life, knowledge, will, etc., were accidents of a body as a whole, and not of each of its component atoms. Ash'arites recognised a capacity for separately existing atoms to possess all the qualities of bodies.[20]

Mutakallims were closer to a geometrical, mathematical atomism of Pythagorean-Platonic type than to the physical atomism represented by Demokritos. They were primarily interested in whether there was a limit to the divisibility of a body. In connection with the substantiation of finitism they discussed certain attributes of the limit of divisibility, of the atom, viz., its extension, sides, form, qualities, etc. The teachers of *kalam* did not distinguish atoms by magnitude, position, form, etc., because, unlike Demokritos and his school, they did not explain the sense-perceivable qualities of bodies by means of the characteristics of atoms and their motion, and did not construct secondary qualities from primary ones.

The conception of atomist *mutakallims* set out above is (as was noted in the mediaeval Islamic literature[21]) one of four possible versions of the answer to whether bodies were divisible, depending on the character of the divisibility (finite or infinite, actual or potential). These variants were as follows: (1) a body admitted of a finite number of actual divisions, and consisted of a finite number of atoms (parts not having parts); (2) a body admitted of an infinite number of actual divisions and consisted of an infinite number of atoms; (3) a body admitted of a finite number of potential divisions, and consisted of a finite number of atoms, which existed potentially but not actually; (4) a body admitted of an infinite number of divisions and did not consist of actually existing atoms.

The first answer represented the point of view of the classical atomists and finitist *mutakallims*, the last that of the Peripatetics. The third view was that of Shahrastani, which (according to Fakhr ad-Din ar-Razi) he set out in his book *Al-Manahij wa-l-hayanat* (*Way and Explanations*). That book, however, has not come down to us. Shahrastani's views are usually compared with the theory ascribed to Plato that there comes a moment in consecutive division of a body when it is annihilated and transformed into *materia prima*.

The second view is ascribed to Nazzam and Anaxagoras, though it is more accurate that Nazzam himself did not put it forward but was compelled (according to the well-known method of *ilzam*) to adopt it. In fact he, like the Peripatetics, denied the atomic structure of a body. He stressed that each particle of a body had a part, and each half a half; a part was always divisible and there was no limit as regards divisibility.[22] But infinite divisibility, which is at stake here, is more actual (as was held by the Stoics) than potential (as with the Peripatetics). Nazzam's claim, explaining the difference in volumes of bodies on the assumption of their divisibility to infinity, witnesses to that to some extent: if a mountain and a mustard seed were divided into half (he argued), the half of the mountain would be bigger than the half of a mustard seed, and it would be just the same if they were divided into four, five, or six equal parts; the quarter, fifth or sixth of the mountain would be bigger than the quarter, fifth, or sixth of the seed, and that would remain true even with such division to infinity.[23] Jurjani, incidentally, pointed out that Nazzam did not distinguish between what was potentially in a thing, and what was actually in it;[24] he was therefore faced with the problem of complete divisibility (which Aristotle discussed in his *Coming-to-be and Passing-away*):[25] if a continuum could be divided wherever one wanted, at some convenient place, there were no logical grounds for asserting that it could not be divided immediately in all these places. When affirming the actual divisibility of a body to infinity Nazzam should have concluded (according to Jurjani) that an infinite number of parts actually existed in a body. And since any possible division could be considered already realised, these particles should be indivisible. The doctrine of an infinite number of atoms in a body ascribed to Nazzam is thus only a logical deduction from his doctrine of the actual divisibility of a body to infinity.

The idea held by Nazzam (as noted above), i.e. of a body as a combination of different qualities, led to a kind of qualitative atomism. The *mutakallims* Dirar ibn Amr, Hafs al-Fard, and Najjar became followers of his in the ninth century. In their opinion sense-perceived qualities—colour and smell, lightness and heaviness, dampness and dryness, etc.—were elementary entities, 'indivisible parts'. At least ten such 'indivisible parts' were needed in order to form a body.

THE DISCRETE AND FINITIST CONCEPTIONS OF MOTION AND TIME

Assumption of the existence of 'indivisibles' led logically to the principle of *isotachia,* i.e. of motion of equal velocities. In fact, if it were assumed that distance consisted of atoms, then, when a rapid body moved forward by one atom, a slow body would also move forward by one atom, since advance by less than one atom would mean divisibility of the atom, i.e. existence of an even smaller part of distance. All bodies must thus move at an identical velocity. And although the different velocity of motions had been held by Peripatetics since the time of Aristotle as proof of the bankruptcy of the doctrine of 'indivisibles' (because, from their standpoint, the existence of motion with different velocities was an obvious fact), the atomists (including many *mutakallims*) did not stop at recognising the principle of isotachia. Ash'ari, for instance, did not admit the existence of faster or slower motion.[26]

Epicurus, in accepting isotachia in the microworld, at the level of atoms, explained the difference in velocity of motion of bodies of the macroworld by the distribution of the atoms of motion of the separate atoms in the composition of a complex body. But, in addition to this conception there was a theory in antiquity that explained the difference in velocity by the larger or fewer number of intermediate pauses or interruptions of motion.

There are hints of discontinuities of motion in Galen's *De diagnoscendis pulsibus,* and in the theoretical musical treatise *Sectio canonis* attributed to Euclid. The conception of pauses was also developed by certain classical atomists. In the Moslem East it was known as a doctrine characteristic of atomists as a whole.

The doctrine of pauses (*waqafat* or *sakanat*) was shared by several atomists among the Mu'tazilites. In the opinion of Allaf there were unremarked stops in the movement of a horse, because of which one horse was faster than another; just as a stone had unnoticed stops when falling, due to which its motion proved slower than that of a heavier stone thrown at the same time.[27] The number of pauses in the movement of falling bodies was connected with the resistence of the air—in the absence of a medium, in movement in a void or vacuum (*la fi makan*), a heavy body and a light one would move identically, as the Mu'tazilite Nisaburi suggested.[28] (That all bodies fall at the same speed in a void had been put forward as an argument by Aristotle and his followers against the existence of a void. It is considered that Galileo was the first to confirm this statement.)

With Ash'arite *mutakallims* the conception of pauses became predominant. Later *mutakallims* were inclined to the opinion that the objections of the opponents of the doctrine of pauses were more convincing than the arguments of its supporters.[29]

These objections fall into three types. In the first it is the point that assumption of pauses rules out the possibility of two interacting motions existing, covering different intervals at one and the same time. (For example, the motions of two points, one of which is at the centre of a circle and the other on its periphery).

With that assumption movement corresponding to the lesser distance should be slower, which meant that there would be more moments of rest in it, so that at certain moments the first movement might take place but the second not. In order to illustrate the coexistence of interconnected movements of different speed or velocity examples were adduced from the movement of the sun and the shadow of a stick, of the peripheral and central circumference of a millstone, of the outer and middle rods of a three-rod circulation, and so on. The existence of pauses in slow movement would lead to absurdity, to the existence of a cause (the motion of the sun) without realisation of the effect (movement of the stick), to crumbling of the millstone and breakdown of the circulation (we shall speak of this in more detail below).

The objections of the second type showed that admission of pauses led to an absurd affirmation of realisation of the effect in the absence of a cause. That was evident from the following example. A rope is attached to a wooden beam lying on the water in the middle of a well 100 cubits deep; the other end of the rope is attached to a bucket lying on the bottom of the well. A rope is lowered into the well with a hook, which is caught onto the upper end of the first rope. The bucket is drawn up out of the well by pulling on the second rope. It turns out that the hook covers a distance of 50 cubits in the same time as the bucket 100. The movement of the hook is part of the aggregate cause of the movement of the bucket, and if there were a stop in the first movement that would signify realisation of the effect in the absence of its cause.

The sense of the third type of objection was that to explain the slowness of movement by the presence of a certain number of stops meant that it was impossible to perceive any movement on earth—the running of a horse, the flight of a bird, etc. For the distance covered by such movements in a certain time was incomparably less than that covered by the heavenly vault in the same time. There would therefore have to be rather more elements of rest in the movement of a horse than in the motion of the heavenly vault since the latter was faster than the former. Then the number of moments of rest in the movement of the horse would allegedly be thousands of times more than the number of moments of motion, and in that case the horse would have to be always in a state of rest—in any case we would see it resting many thousand times more than moving.

But such arguments as the 'crumbling of the millstone' were considered unsound by adherents of the conception of pauses. It was quite possible, in their view, for there to be moving and resting parts simultaneously in a solid, and it would not lead to its break-up. If, for instance, we took an iron post, and secured one end of it, leaving the other free, then if the free end were struck the upper part of the pole would be moving and the lower, not, but the pole would not thereby break up. As for the moments of rest in the movement of a horse, they, on the contrary, were just absorbed by the moments of movement, even though the latter were fewer in number, because movement was something existent (*wujudi*) while rest was something non-existent (*'adami*); the movement of the horse therefore seemed continuous.[30]

The doctrine of leaps is also one of the discrete conceptions of motion. In antiquity it was developed by Damascius, in whose opinion motion proceeded through intervals and not points, by leaps as it were. In Islamic philosophy the theory of leaps (*tafra*) is usually associated with the name of Nazzam. But whereas motion always proceeded by leaps for Damascius, spasmodic intermittence was always combined with continuousness for him.

The conception of a leap was put forward by Nazzam in reply to Allaf's question (already asked earlier by Zeno) of how an infinite number of things could pass during a finite time and, in particular, how an ant could crawl from one edge of a rock to the other? In Nazzam's view it covered part of the rock by crawling and part by a leap. The leap thus signified that a body could be in one place and then in a third without passing through intermediate spots, and without disappearing in the first so as to reappear in the tenth. Moslem doxographers adduced a number of Nazzam's examples illustrating leap-like motion. Here are several of them.

In a spinning top the upper part covered a greater distance than the bottom, not to mention the axis, and that was because the upper part darted across several intervals of distance.

In the example of the bucket and hook cited above, the bucket travelled the greater distance because it covered that part of distance by leaps.

A man on the poop of a ship sailing at great speed could move towards the bow and reach it, and do so only thanks to the leaps he made in his movement.

But, as the atomist *mutakallims* remarked, a satisfactory answer was not given to the problem posed by Allaf, and it boiled down to another problem of the same kind, because one could ask whether the part of the distance surmounted by a leap was infinite or not. If it was, then one could ask the same initial question about it, viz. how could the infinite be covered. And if it was finite, then one could ask how the rest, the infinite distance, was to be covered. There could only be one way out, viz., to admit the timeless character of a leap. But then, said Juwayni, it would be quite possible for a person to fly over the distance from the far east to the far west without going through either the earth, the sky, or the air, and all that in a very short instant, because a leap took no time at all.[31]

Commenting on Nazzam's answer to the possibility of crossing an infinite distance in a finite time, Jurjani was puzzled why he had not answered that the interval of time had also been divided to infinity, and consisted of an infinite number of parts, so that a part of the time corresponded to a part of the distance.[32] In fact, in Nazzam's day *mutakallims* did not yet teach about a structural correspondence between matter (body), space (distance), and time. The appeal to the concept of leap, which seemed strange and unconvincing even to Nazzam's supporters (including Jahiz), was evidence rather that the first atomists of *kalam* had not developed a discrete theory of time.

At the same time, as Moses Maimonides said, *mutakallims* extended their finitism not only to bodies and distance but also to time and motion. Because, he said, they undoubtedly knew Aristotle's proof, in which he showed that distance, time, and spatial motion were three things that corresponded to each other in their being, i.e. there were the same mutual links between them, so that when one of them was divided, the other was divided in the same way.[33] Actually, Aristotle had shown, in his *Physics,* that the atomistic (and correspondingly the anti-atomistic) conceptions of space, time, and motion were logically connected: when one was affirmed it was necessary to affirm the second and the third.[34] But such logical consistency was not often observed either before the Stagirite or after him, especially among atomists.

In particular, the question of Demokritos' recognition of an atomic structure of space, and especially of time, remained disputed. It was known, furthermore, that Strato, who tried to combine the Aristotelian position with certain propositions of Demokritos', had not been stopped by the inconsistency that Aristotle had warned against: while affirming the atomic character of time, he considered magnitude and space divisible to infinity. A similar position is to be found in Indian atomism. The Jainists held that bodies, space, and time were atomic; the atomists of the Vaisesika school, however, did not think that space and time consisted of indivisibles. Inconsistency was also tolerated by Abu-Bakrar-Razi, when he affirmed the atomic character of matter but not of space and time.

This inconsistency is also met in early *kalam.* The atomist *mutakallims,* of course, were predisposed to denial of the infinite divisibility not only of a body but also of everything finite. Ash'ari, for instance, said that an analogue of their doctrine of the indivisible particle, and of there being nothing smaller than it, was the doctrine of minimum pleasure and benefit, and of the process of division of pleasure and benefit ending in an indivisible part, anything smaller than which could not be imagined.[35] In the spirit of that orientation *mutakallims* should have affirmed the existence of minimum of an interval of space and time. But no unambiguous information has come down to us about the atomising of time and motion among early *mutakallims.* Sometimes an expression 'the least time' (*aqall al-awqat*) is met in them and they often argued about the length of existence of an accident during two moments of time (*waqtayn, zamanayn*), of two nows (*aanayn*). But it would be risky to identify such moments and nows with atoms of time. These expressions were employed as non-technical terms by both atomists and continualists.

One should not understand as an assertion of the atomicity of movement the opinion of Alaf's, cited by Ash'ari, that the motion of a body was divided according to the number of its parts, so that a movement that had one of its parts as its substratum differed from a motion that had another part as its substratum; and that motion was also divided by time so that a movement that took one time differed from a movement that took another,[36] Jubba'i and certain other finitists rejected this opinion of Allaf's which witnesses that these variants of the division of motion did not necessarily have any connection with admission of its atomicity or of the atomicity of a body. Furthermore, if Allaf had claimed a structural correspondence between time, motion, and distance, he could not have posed (to Nazzam) the question (unsolvable from his point of view) of the crossing of a given distance (interval) during a finite time given infinite divisibility of bodies.

Spokesmen of later *kalam,* including Maimonides' contemporaries, were more consistent on the plane of asserting a structural correspondence between matter, space, time, and motion. In their works the notion of the finity of motion and time, which were usually ascribed to atomists as a whole, were developed as a rule in a context of discussion of the 'indivisible particles' of bodies, in which it was cited as an initial premiss of one of the proofs of the existence of atoms.

THE ARGUMENTS OF ATOMISTS AND ANTI-ATOMISTS

According to this proof of the existence of atoms, motion was divided into parts—present, past, and future. The present part of motion existed, otherwise there would be neither a past part nor a future one, since the past was what had been present, and the future was what would sometime become the present. The present part was indivisible, otherwise one of its supposed parts would exist in present time but the other not, and then the latter would not be a present part of motion. Motion, consequently, consisted of indivisible parts. The existence of corresponding indivisible parts of distance and body followed from the existence of indivisible parts of motion: if the part of the distance traversed by an indivisible part of motion were divisible, then the given part of motion would be divisible. Similarly a body consisted of 'indivisible' parts, or atoms. In the opinion of Taftazani it would be more convincing, when proving the finiteness of a body, to cite the fact of the existence not of present motion but of present time, because the indivisibility of the latter was obvious.[37]

That argument, which is usually adduced in the name of atomists in general, and not just of *mutakallims,* was not widely known among the early teachers of *kalam.* In particular it was not met either in Shahrastani's treatise *Fi ithbat al-jawhar al-fard* (On the Proof of the Existence of a Single Substance), nor in the list of the arguments of atomists cited by Ibn Hazm.[38]

The main argument of the early atomist *mutakallims*,[39] an analogue of which can be found in the classical atomists, was linked with an untrue proposition of antique and mediaeval mathematics, that the infinite sum of 'the infinitely small' quantities not equal to zero would always be infinitely great. From that it followed that, given division of bodies to infinity, the differences in their volumes would be eliminated, and they all would have an infinite volume. If division were continued to infinity, atomist *mutakallims* said, a mustard seed could be divided into layers that could cover not only the earth but also the sky. Other variants of that argument were also met, in which a mountain and a barleycorn, and an elephant and a speck of dust, a body and half of a body were compared.

The anti-atomists, in particular the *falasifa*, when answering arguments of that kind, claimed that they were justified only on the assumption of actual divisibility of a body to infinity, but not of potential divisibility, which was the only one they recognised.

The second argument in favour of finitism was a modification of the aporia 'Achilles and the Tortoise', known in antiquity, and formulated by Zeno, that the faster could never overtake the slower or even the one standing still, if they were a certain distance apart from one another, and that distance were divisible to infinity; in order to traverse the whole distance it was first necessary to traverse half of it, and in order to traverse that half, it was first necessary to traverse a quarter, and so on, to infinitude, which was impossible in a finite time.

As we remarked above, Nazzam put forward the theory of leap when tackling these difficulties. The Peripatetics had taught that it was sufficient to assume infinite divisibility of time for an infinite number of parts of a given interval of time to correspond to an infinite number of parts of an interval of distance.

The atomist *mutakallims* also put forward geometrical arguments to substantiate finitism. As was to be expected, they saw the point above all as the geometrical minimum, but they thought of the point not as an element of a spatial formation but as the boundary of a line (they correspondingly considered a line the boundary of a plane, and a plane the boundary of a body). Bodies, they said, were in contact at planes, planes at lines, and lines at points, from which it followed that a point really existed. It was indivisible because otherwise it would have been a line or a plane. Finitism was also substantiated by the existence of points as the place of contact of a sphere and a plane.

Another 'geometrical minimum' was the angle between a tangent and an arc of circumference. That angle (as proved in Euclid's *Elements*) was the smallest angle, and it was quite impossible to divide it. In pointing out these geometrical minima some *mutakallims* noted that it was a matter of analogues (*mithal muwazin*) of the atoms of the physical world.[40]

Opponents of atomism, objecting to the equating of an atom to a point, pointed out that a point was an accident, so that indivisibility of its substratum did not follow from its indivisibility. This last argument was refuted by citing the fact that the angle between a tangent and arc was the minimum only in comparison to the acute angles formed by straight lines only when these acute angles were compared, and not acute angles in general.

Infinitists, above all the *falasifa*, not only refuted the arguments of atomists but also put forward their own counter-arguments against the existence of 'indivisibles'. These arguments were usually divided into different types in the works of late *mutakallims*, such as from sides, from contacts, from velocities, from geometry, and so on.[41]

The arguments from sides were the following: (1) the atom occupied a place in space, and in any thing that occupied a position in space the left side differed from the right, the front from the back, and so on; an atom must be divisible therefore into the corresponding sides; (2) if a platelet were formed from atoms and put between us and the sun, its illuminated side facing the sun would differ from the dark side facing us; consequently atoms were not indivisible.

In the view of the atomist *mutakallims* a thing could be indivisible in itself but have different angles that would be like accidents to it, which did not involve divisibility of the thing itself. The centre of a circle, for example, faced all the points of the circumference on different sides although it was in itself indivisible.

Arguments from contacts were similar to this type of argument. If a body consisted of atoms, the infinitists said, the atoms would be so disposed in it that one was in the middle and two were on the left and right of it. The middle atom was not in contact with that on its left, by the part in contact with the atom on its right. It must therefore be divisible.

That argument, which was known as the 'third atom' in antiquity, was relatively easily countered by the atomists of *kalam*. In their ideas the sides of an atom that were in contact with other atoms were mathematical and not physical parts of it, which did not contradict its indivisibility.

In the other argument from contact it was a matter of an atom located above the point of contact of two other atoms, which meant that it was only partly in contact with each of them. The following proof was adduced in support of the possibility of such a localisation. On lines consisting of an uneven number of atoms (for example, of five) two atoms moving toward each other with equal velocity must meet in a third, the middle atom.

The atoms moving toward each other, the atomist *mutakallims* answered, will drop out before reaching the third atom, since the latter would not contain them both; yet for them to move onto it it had to be able to accommodate them both. Furthermore, the opponents' objection would be justified if an atom could exist separately and if it could move, while the adherents of the doctrine of the constructing a body from atoms denied the possibility of the existence of separate atoms, let alone of their movement.[42] According to Taftazani, all these arguments were refuted in some of the books of Mu'tazilites, by the claim that the anti-atomists meant divisibility in imagination (*bi-l-wahm*), while finitists understood the indivisible in reality (*bi-l-fi'l*) by an atom[43].

Arguments from velocity were based on a thesis that assertion of difference in the velocities was equivalent to denial of indivisibles. Since atomist *mutakallims* resorted to the conception of pauses to explain this difference, the antiatomists began to prove the absurdity of the conception. The most popular argument for that was that of the crumbling of a millstone (a version of the so-called Aristotelian wheel). The movement of a millstone, they said, showed that a point on the periphery of the circle moved faster than, for example, points of an inner circle concentric with it. From that it followed that if the external point moved one indivisible distance, the central one would either move a lesser distance (i.e. the indivisible divided) or not move at all. But rest of the inner circle would mean dispersal of all the parts of the millstone. For each of the atoms of the greater circle were in contact with corresponding atoms lying in a circle smaller than it (namely, that atoms that lay together with it on a straight line from the centre); the second circle, would therefore either move along with the movement of the first or the circles would separate from one another, and the millstone would break up into concentric circles.

In the 'shadow of the gnomon' argument, it was said that the shadow of a wooden stick (gnomon) should move in accordance with the motion of the sun. If the sun moved but the shadow remained still, a line drawn from the end of the shadow and passing through the tip of the gnomon would bifurcate and would have two ends (one where the sun had been and the other where it was now) and that was impossible. If the sun moved one indivisible distance, the shadow would obviously have to move a smaller fraction, i.e. the indivisible would be divisible. Finally, it could not be assumed that the shadow and the sun moved equally fast. That contradicted what was observed.

In disputes about 'indivisibles' and continuum Aristotle himself had resorted in the main only to arguments of a philosophical order. He did not consider it possible to appeal directly to the propositions of mathematics because they ultimately got justification, in his eyes, only in physics. But the Peripatetics did not remain faithful to that principle. Soon after the death of their teacher they began to put forward geometrical arguments as well in disputes about 'indivisibles'. The treatise *On Divisions*, long attributed to Aristotle himself, but in actual fact seemingly written by Theophrastus, developed on that soil. Many of the arguments 'from geometry' that were met among the opponents of atomism in the Moslem East were formulated in it.

One of these arguments spoke of the impossibility of bisecting a line consisting of an uneven number of atoms. Another example was based on the theorem of the incommensurability of the diagonal and side of a square: if the square consisted of 16 indivisibles, there would be four of them in the side and four in the diagonal, i.e. it would turn out that the diagonal and side were equal! Such considerations did not embarrass *mutakallims*. They did not consider geometrical objects and constructions things that existed in the physical world, 'outside the mind'.[44]

The *mutakallims* thus concentrated their attention on questions connected with substantiating the principle of finitism, viz., on the minimum number of atoms in a body, the extension of the atom, its sides, etc. By working up these problems they made a definite contribution to the development of atomistics. They continued the classical atomist tradition which had been nearly buried in oblivion in mediaeval Christian Europe. They developed a number of ideas in more precise form than the atomists of antiquity, such as the distinction between extension and corporeality, the proposition of the contact of the sides (which were essentially mathematical, geometrical parts of the atom, but not physical components of it, which made it possible to form a continuum of 'indivisibles'), and the conception of pauses and leaps. The main philosophical and mathematical arguments in defence and refutation of 'indivisibles' were crystallised in the doctrine of the atomist *mutakallims* and of their opponents, arguments that would be repeated in different versions over the centuries.

NOTES TO CHAPTER 4

[1] See: Ibn Maymun (Maimonides). *Dalalat al-ha'irin* (Ankara, 1974), p 217

[2] See: Al-Marjani, Shihab ad-Din. *Al-Hikma al-baligha* (Vyacheslav press, Kazan, 1888), p 20.

[3] Aristotle. *Coming-to-be and Passing Away* (Loeb Classical Library, No. 400. Heinemann Ltd., London, 1978), pp 177-179.

[4] See: Ibn Hazm. *Kitab al-fisal*. Vol. V, p 95.

[5] *The Holy Qur'an*, verses 6 : 80; 2 : 29; 41 : 54; 72 : 28; Al-Khayyat, *Kitab al-Intisar* (Imprimeries Catholique, Beirut, 1967), pp 16-17.

[6] See, for example: Ash-Shahrastani. *Al-Milal wa-n-nihal*, Vol. II (Mu'assasat al-Halabi wa-shurakah, Cairo, 1968), pp 158, 162.

[7] See: Al-Ash'ari. *Maqalat al-islamiyyin* (Verlag Franz Steiner, Wiesbaden, 1980), p 317.

[8] *Ibid.*, pp 316-317.

[9] Aristotle. *Physics*. VI, 2, 209. In: *The Works of Aristotle* (Encyclopaedia Britannica, Chicago, 1962), p 288.

[10] Al-Ash'ari, *Maqalat...*, p 318; An-Nisaburi. *Al-Masa'il fi-l-khilaf bayana-l-basriyyin wa-l-baghdadiyyain* (Ma'had al-inma' al-'arabi, Beirut, 1979), p 58; Al-Juwayni. *Ash-Shamil fi usul ad-din*, Vol. I (Dar al-'arab, Cairo, 1960-61), pp 60-62; Ash-Shahrastani. *Nihayat al-iqdam* ... (Martabat al-Muthanna, Baghdad), pp 507-508.

[11] Al-Ash'ari. *Op. cit.*, p 302.

[12] An-Nisaburi. *Op. cit.*, pp 58, 61.

[13] *Ibid.*

[14] Al-Ash'ari. *Op. cit.*, pp 301-304; At-Taftazani. *Sharh al-Maqasid*, Vol. I (Al-Matba'a al-'usmaniyya, Istanbul, 1898), p 289.

[15] An-Nisaburi. *Op. cit.*, pp 59-60, Al-Ash'ari. *Op. cit.*, pp 316-317; Ash-Shahrastani. *Op. cit.*, pp 511-512.

[16] See: Al-Ash'ari. *Maqalat...*, p 303.

[17] See: An-Nisaburi. *Op. cit.*, pp 47, 98; Al-Juwayni. *Op. cit.*, pp 59-62; At-Taftazani. *Op. cit.*, Vol. I, pp 310-311.

[18] See: Ibn Furak. *Op. cit.*, p 206.

[19] Al-Ash'ari. *Op. cit.*, p 303.

[20] *Ibid.*, pp 309-317; Al-Juwayni. *Op. cit.*, pp 56, 67.

[21] See, for example: Fakhr ad-Din Ar-Razi. *Kitab al-mabahith ash-sharqiyya* (Matba'at majlis da'irat al-ma'arif, Hyderabad, 1343 A.H.), Vol. II, pp 8-10; Al-Jurjani, *Sharh al-mawaqif* (Matba'at as-sa'ada Press, Cairo, 1907), Vol. VII, pp 5-6.

[22] Al-Ash'ari. *Op. cit.*, p 318.

[23] Al-Khayyat. *Op. cit.*, p 34.
[24] Al-Jurjani. *Op. cit.*, p 10.
[25] Aristotle. *Coming-to-be and Passing Away* 1, 2, 316-317. *Op. cit.* pp 179-187.
[26] See: Ibn Furak. *Op. cit.*, p 264.
[27] See: Al-Ash'ari. *Maqalat...*, p 322.
[28] See: Al-Nisaburi. *Op. cit.*, pp 200-201.
[29] See: At-Taftazani. *Sharh al-Maqasid*, Vol. I, pp 275-276; Al-Jurjani. *Op. cit.*, Vol. VII, p 25.
[30] *Ibid*; see also: Ibn Furak. *Op. cit.*, p 208.
[31] See: Al-Juwayni. *Op. cit.*, p 51.
[32] See: Al-Jurjani. *Op. cit.*, p 10.
[33] See: Ibn Maymun. *Op. cit.*, pp 201-202.
[34] Aristotle. *Physics*, VII, 1, 231b; IV, 11, 219a.
[35] See: Ibn Furak. *Op. cit.*, p 127.
[36] See: Al-Ash'ari. *Maqalat...*, p 319.
[37] See: At-Taftazani. *Op. cit.*, p 296.
[38] See: Ash-Shahrastani. *Nihayat*, pp 505-514; Ibn Hazm. *Op. cit.*, Vol. V, pp 93-98.
[39] *Ibid*. See also: Al-Jurjani. *Op. cit.*, Vol. VII, pp 7-20.
[40] Ash-Shahrastani. *Op. cit.*, p 512.
[41] See: Al-Jurjani. *Op. cit.*, p 20 ff; At-Taftazani. *Op. cit.*, pp 300-304.
[42] See: Al-Jurjani. *Op. cit.*, p 23 (Commentaries of as-Syalkuti).
[43] See: At-Taftazani. *Op cit.*, p 300.
[44] See: Al-Jurjani. *Op. cit.*, p 23.

SECTION II

Falsafa: Development of the Antique Tradition

5

Falasifa

THE FIRST LAY PHILOSOPHERS

The *mutakallims*' preparation of the soil for the development of a secular or lay philosophy is confirmed by the fact that the work of its first representative coincided in time with the flowering of *kalam*. The founder of *falsafa* was Abu Yusuf Yaqub ibn Ishaq al-Kindi, called the Philosopher of the Arabs because he became the first Arab expert and propagandist of the 'alien sciences' that before that had mainly engaged Syrian-speaking Christians and Sabeans of Harran.

Kindi was born at the end of the eighth century A.D. in Kufa in a high-born Arab family, and got his philosophical training in Baghdad. He enjoyed the patronage of the Caliphs Mamun and Mutasim, and was the teacher of the latter's son Ahmad, to whom he dedicated several treatises. The prominent place he occupied in the court facilitated his studies of the philosophical sciences, but at the same time made him the victim of envy and palace intrigues. Under the Caliph Mutawakkil he was victimised along with Mu'tazilites. He died in Baghdad between 860 and 879 A.D.

Kindi wrote more than 200 works on philosophy, psychology, medicine, geometry, astronomy, the theory of music, chemistry, and many crafts. He put the works of classical thinkers into circulation, and edited Arabic translation of them. The first Arabic dictionary of philosophical terms *Fi hudud al-ashya' wa-rusumiha* (On the Definitions and Descriptions of Things), written by him, was undoubtedly linked with that work. His best known philosophical works include *Risala fi kammiyyat kutub Aristutalis* (A Treatise on the Number of the Works of Aristotle and on What is Needed for the Mastery of

Philosophy), a kind of sketch of the future work of Muslim philosophers, devoted to classification of the sciences; *Fi-l-falsafa al-'ula* (On the First Philosophy), *De quinque essentiis* (The Book of the Five Essences), *Fi-l-'illa al-fa'ila al-qariba li-l-kawn wa-l-fasad* (On the Proximate Efficient Cause of Generation and Corruption), and *Risala fi tanahi jirm al-'alam* (A Treatise on the Finitude of the Body of the World).

Kindi did not create an integral philosophical system and his works reflect a quite mixed conglomerate of doctrines, taken from Aristotle, Plato, Plotinus, Proclus, and the Pythagoreans, with which the translators from the House of Wisdom abundantly supplied the Arabic reading public. The best known of his conceptions included those of the five essences (matter, form, motion, place, and time) and of the four types of intellect, viz., (1) active (always found in an actual condition); (2) virtual or potential (found in the state of 'deprivation'); (3) acquired in an actual state (being in a state of 'habitus' (possession) in view of which it is called 'intellectus in habitu'—*al-akl bi-l-malaka*); (4) 'manifested' (functioning). This latter conception, which was preceded by the classification of reason developed by Alexander of Aphrodisias ((1) material, (2) virtual, and (3) active intellect) became the first in a series of analogous conceptions of succeeding generations of *falasifa*. Kindi also deserves credit for having introduced the symbolical and allegorical interpretation of the Koran into *falsafa*.

There fell to Kindi's lot, as the founder of secular philosophy, the difficult task of legalising it in Moslem society. He showed the necessity of philosophy, which he defined as acquiring knowledge about the true nature of things, to the extent of human powers, by means of an argument drawn from Aristotle's treatise *Proprepticus* (An Exhortation on the Study of Philosophy): the opponents of truth (i.e. traditionalists who attacked philosophy as a science foreign to Islam) must of necessity attain it since they would have to say in any case whether or not it should be attained. If they said it must, then they would have to seek it; but if they said it must not, then they would have to disclose the reason for that and justify their claim by means of proof. But discovery of the truth and proof were nothing else than the attaining of knowledge about the truth of things.[1] In addition, Kindi said, knowledge of the true nature of things included knowledge of God and his oneness, and also of virtue, good, and harm.

One should not be ashamed, therefore, he argued, of approving and attaining truth wherever it came from, be it even from tribes and peoples of countries remote from and not in contact with one's own. There was nothing better for the seeker after truth than the truth itself; one should not scorn and look down on those who expressed it or passed it on; the truth could not belittle anyone but on the contrary elevated everyone.[2]

That thesis, in turn, presupposed a notion of the development of human knowledge as a gradual process in which this knowledge was enriched by the relative truths elicited by many generations of the scholars of various countries. Repeating a well-known statement of Aristotle's, Kindi wrote that after all nobody had yet succeeded in reliably comprehending the truth by his own efforts, but everyone either did not attain even a fraction of the truth in general or acquired only a very little of what deserved to be called truth. But when all these grains attained by everyone who strove after truth were gathered together, the sum total obtained was something very impressive in volume.[3]

At the same time Kindi noted that human knowledge ranked below the divine and therefore yielded place to the prophetic since, in contrast to the latter, it was developed through long labour and did not arise through suggestion from above.

Though he lived at a time favourable to free-thinking, Kindi was nevertheless forced to hide his views from dogmatic traditionalists, who undeservedly bestowed the laurels of truth on themselves, and persecuted free thought as a manifestation of lack of faith, solely in order to preserve their monopoly in the 'truth trade'. He was wary of them, he wrote, because they were people too limited in their nature to find the truth while their knowledge was too little for them to deserve the fame of people whose opinion was accepted on faith, since they showed great zeal above all in achieving benefits common for all, including themselves. He was wary of dogmatists because the vile envy that dwelt in their bestial souls shielded the light of truth from their understanding by an impenetrable veil. He was wary of them because they considered themselves the possessors of human virtues, they had not had the time to acquire and from which they were still very, very distant, being insolent, captious opponents who protected the fake thrones they had elevated themselves to without any right to them. He was wary of them, finally, because they lay claim to predominance and traded in faith so being enemies of faith, because whoever traded in something, sold it, and he who sold some thing or other lost it; verily, there was no faith in him who was opposed to knowledge of the true nature of things and who called the acquiring of such knowledge lack of faith.[4]

Kindi's innermost thoughts were undoubtedly much bolder than what he shared with contemporaries in his treatises. That is obvious if only from the fact that his closest disciple Ahmad ibn at-Tayyib as-Sarakhsi (833 or 837 to 899 A.D.) took the road of frank criticism of prophecy and unmasking of the 'three impostors'.

According to Biruni, Sarakhsi 'was the most notorious heretic among the people of his time'. He panicked devout Moslems by naming the precise date (relying on astrological calculations) when Islam's dominance over people would come to an end, viz. in 693 years. 'All those who hoped for the passing of supremacy from the Arabs,' Biruni wrote, 'adhered to it. Thus, the hearts of weak Moslems were filled with false ideas.'[5]

As for the mathematical operations on the numerical meanings of the secret (mystic) letters that prefaced certain surahs of the Koran, by means of which Sarakhsi forecast the end of Islam, Biruni said ironically that he would like to know when Sarakhsi began to cite verses of the Koran, although he had previously written books and treatises on disclosing the secrets of impostors, by whom he meant prophets. He made a laughing-stock of them and said such things about them for which they were too elevated.[6]

Sarakhsi's works on deceiver prophets, like the works written about them by Ibn ar-Riwandi, have naturally not survived. We also know ideas of another overthrower of revealed religions—Abu Bakr Muhammad ibn Zakariyya ar-Razi (known in Europe as Rhazes), encyclopaedist, physician and philosopher, only from excerpts cited by other mediaeval authors, primarily Abu Hatim ar-Razi. Rhazes was born in the town of Raiy (near modern Tehran) in 865 A.D., was the head of a clinic in Raiy and later in Baghdad, and died in Raiy in A.D. 925 or 934. According to Biruni, Rhazes wrote more than 184 works including such philosophical ones as *At-tibb ar-ruhani* (Spiritual Physick), *Al-qawl fi-l-hayula* (Discourse on Matter), *Al-qawl fi-z-zaman wa-l-makan* (Discourse on Time and Place), *Al-qawl fi-n-nafs wa-l-'alam* (Discourse on the Soul and the World).

Rhazes' ontological ideas were based on the doctrine of the five eternal principles (*al-qudama'*): the Creator, the universal spirit, matter, time, and place.[7] He postulated the existence of absolute place and absolute time, and explained the formation of material things by the combining of indivisible particles. A rejection of blind faith in authorities, struggle against mystic prejudices in the interpretation of natural phenomena, reliance on experimental methods of investigation, and belief in the continuous progress of human knowledge, were characteristic of his views on scientific knowledge. Following the threefold division of the human spirit adopted by Plato, he called (in his *Spiritual Physick*) for 'inuring' of the vegetative spirit, the source of cravings, and the animal spirit, the source of anger, their subordination to the spirit of reason, and for observation of measure in everything.[8]

Rhazes made his critique of prophecy in three directions. In the first place he pointed out the absolute sovereignty of the human intellect, its independence of authorities of any kind standing above it and dictating to it, what to recognise as true and what as false; in what consisted good and in what evil; what was useful and what was harmful. Since all people possessed reason there was no need for God to endow someone among them with the gift of prophecy, empowering him to lead people along the path of righteousness on the basis of certain principles drawn from another source than human reason. People were born with identical dispositions to mental activity, which were later only differentiated under the impact of the concrete circumstances of life that induced one or other of the capacities granted by nature to develop. No single group, therefore, could claim that it alone possessed full knowledge of the truth, and dictate its point of view to other groups, citing the authority of its own prophet.

Yet several groups—followers of various creeds—laid claim at the same time to knowledge of the whole truth but, since each community followed its own imam, declaring the rest of 'God's chosen' deceivers, conflicts and wars arose that carried off a host of human lives. Such a state of things of course contradicted the idea of the wisdom and mercy of God.

Finally each prophet claimed that he derived the knowledge he spread from revelation. But if that source were in fact one and the same there should be no contradictions among them on the most elementary matters. Jesus claimed he was the son of God, Rhazes said; Moses claimed God had no son, Muhammed claimed that Jesus was the same creation as all other people. Mani and Zarathustra disagreed with Moses, Jesus, and Muhammed as regards the age-old principle, the origin of the world, and the principle of good and evil, while they themselves held different points of view on the two beings (i.e. Light and Darkness) and their world. Muhammed claimed that Christ was not killed, but Jews and Christians denied that, declaring that He was killed and crucified.[9]

Having brought out the contradictions between religions that claimed their identical divine origin, Rhazes established the inner contradictoriness of each of them separately. He turned his criticism, moreover, not only against Islam, Christianity, and Judaism, but also against Zoroastrianism and Manichaeism, in their enthusiasm for which dogmatists sought motives inducing other thinkers to disclose the flimsiness of the ideas of the three Abrahamic religions. As for the Koran, in particular, Rhazes pointed out the diametrically opposite answers in it to questions connected with ideas about God (whether He was an abstract entity or an entity endowed with corporeal and anthropomorphic qualities) and about man (whether his actions were predetermined by the All-Highest or were based on freedom of choice).

The Holy Scriptures, Rhazes declared, were a collection of ancient legends, full of discrepancies, and absurdities, which could evoke credibility in themselves only, perhaps, among madmen, women, and children. He saw the cause of the vitality of religious prejudices in the strength of traditions and force of habit, which were easily converted into second nature, and also in the fact that when the clergy did not achieve their own authority, they implanted these prejudices in the people, employing their influential position in the state. Independently thinking people naturally became the first victims of the teachers of the law; in the struggle against them the clergy resorted to assertions that any argument about God and His works that went outside the estabilshed dogmas was apostasy or heresy. When one asked them to provide arguments to support the truth of their claims, they flew into a rage, not deigning to spill the blood of those who made such demands on them, to ban argument, and to incite killing of those who did not agree with them. As a result the truth proved to be as deeply buried and hidden as could be.[10]

But in the Holy Scriptures themselves, Rhazes wrote, there was neither good nor harm, and that was their great difference from scientific books, which eased people's life and protected their health. He was far from thinking it possible to agree the holy texts with the data of science by interpreting them in a symbolical and allegorical way. If any dogma contained certain truths, he argued, seeking them there and not in the sciences would be equivalent to choosing the longer of two roads leading to a certain goal. But in reality, he said, religious notions did not contain a single truth useful to people. Knowledge of celestial bodies and the earth, of geometry and logic, medicine and pharmacology were all the fruits of intellectual activity and not of prophecy, creations of science, experience, and the efforts of individual scientists, and the generations of them. Turning to religious apologists he asked whether they could show even one page with instructions by their imams on how to distinguish poisonous substances from edible ones, or on how remedies acted, and with instructions that would do people good and that could compare with the ideas of Galen and Hippokratos expounded in thousands of pages; and whether they could boast of even some discovery made by some one of their imams in geometry or any other such branch of knowledge. He knew, he wrote, that what their imams said (as they affirmed) was useless, highfaluting nonsense, picked up nevertheless both by the common people and by noble men.[11]

THE BRETHREN OF PURITY

A new stage in the development of *falsafa* began in the tenth century A.D., linked in the main with the spread of Ismailism.

That influential sect of Shi'ite Islam arose through a split in the latter in the middle of the eighth century. Later it itself broke up into two branches, one of which came to be called Qarmathians at the end of the ninth century; the other was linked with the Fatimids, a dynasty that headed the new Moslem power—the Fatimid Caliphate (909-1171), founded by it. The Fatimid Ismailites actively propagandised their doctrine by numerous emissaries outside the state they founded, so as to extend their sphere of influence in various areas of the more and more disintegrating Abbasid Caliphate. Their rivals in Arabia were the Qarmathians.

The Qarmathian movement drew broad masses of the peasants and artisans into its ranks, which gave its ideology a social direction, and introduced slogans of equality and justice into it. In A.D. 899 the Qarmathians founded their own state in Bahrein, which was headed by a council of six elders whose decisions were adopted collegially.

Ismailism served as the banner of various social and political movements directed against the Abbasid regime. Its theoreticians, who moved far from the Sunnite Islam supported by the Abbasids, created their own doctrine based on differentiating the external, exoteric aspect of the word of the God (*zahir*) and its inner esoteric aspect (*batin*), in view of which its followers were often called Batinites. The external aspect, they taught, coincided with the literal sense of the Scriptures and was intended for the ignorant crowd, while its innermost, cherished meaning, which surmounted all the doctrinal differences between religions, was accessible only to the spiritual leaders of the Ismailites, the imams. The multitude were sunk in a sea of ignorance, which had covered the face of the earth since the universal Flood, when God's true word had been embodied in the letter of the Scriptures. Death in the depths of ignorance was not irreversible, however, because there had been Noah's Ark—knowledge of its innermost meaning—in which everyone initiated into the mysteries of the Ismailite doctrine under the guidance of a mentor could find the road to salvation. Ismailite 'missionaries' were called upon to save human souls from the sickness that was blind faith in the dogmas of religion.

This healing was embodied in the form of initiation, which proposed a step-by-step ascent from *zahir* to *batin*, which essentially no longer coincided with religion but with a philosophical world outlook. In its content the Ismailites' doctrine of being represented a synthesis of classical wisdom and the religious-philosophical views of the peoples of the East, and was based on a Neoplatonic interpretation of what exists as an emanation of the One. Like Mu'tazilites, the Ismailites described the divine principle in negative terms and claimed that it was beyond being and non-being, since to ascribe being to it meant to liken it to the created, empirical world. Together with the Mu'tazilites they gave religious notions an allegorical interpretation: paradise was knowledge, hell ignorance, etc. The Ismailites asserted that an adequate knowledge and understanding of being overcame the narrow confines of existing religions, because it had to be based on reason. The ideal society, too, from their standpoint, should be built on reason; they associated its creation with the coming of the 'hidden' imam who would establish a just order in the relations between people.

Ismailite universalism attracted educated circles by its openness to non-religious, secular knowledge. It can be supposed, in particular, that the idea of knowledge as the saviour and healer of the soul characteristic of Ismailites later suggested to Ibn Sina the titles of his famous encyclopaedic works *Danish-name (The Book of Knowledge)*, *Kitab an-najat (The Book of Salvation)*, and *Kitab ash-shifa (The Book of Healing)*. And it is quite possible that their prototype was the encyclopaedia known as *The Epistles of the Brethren of Purity (Rasa'il ikhwan as-safa wa-khullan al-wafa)* that undoubtedly appeared in connection with the Ismailite movement.

The authors of these treatises, most likely written in the tenth century, belonged to the secret union of the Brethren of Purity and Faithful Friends, reliable information about whose membership and leaders has not been preserved.

Like the Ismailites the Brethren of Purity were opposed to the Abbasid Caliphate, to the 'state of evil' in which venal judges and jurists ruled the roost. The divine law (*shari'at*), they said, was stained by ignorance and darkened by errors, and there was no other way to cleanse it than by philosophy, because the latter contained the strength of conviction and the highest good.[12]

The encyclopaedia of the Brethren of Purity consisted of 52 volumes intended for their followers who, rising above the stage of blind faith in religious tradition, were at one level or another of approximation to the supreme esoteric knowledge. The encyclopaedists divided people into four categories, according to their knowledge and faith: (1) those who were satisfied with the experimental sciences and did not entertain any confidence in the religious sciences, since they were incapable of yielding reliable knowledge; (2) those who believed only the religious sciences; (3) those who lacked both scientific knowledge and faith; and (4) those who were acquainted with both the secular and the religious sciences. They counted themselves and their followers to be in the fourth category.

The Brethren of Purity postulated a principle that if a man believed only the literal sense of a religious doctrine, he was like a mindless body. But since, people were creatures endowed with a rational soul—and their souls were different—they each understood the sacred texts in their own way. Hence the numerous sects in Islam, which in the opinion of the encyclopaedists was only to be welcomed, because each sect disclosed the weak points in the arguments of the others and so taught people logical thinking. The same 'dialectical provocation' of thought independent of belief should, the Brethren were convinced, raise a man above the differences between the revealed religions to seek the road to truth in philosophical doctrines. At the same time they supplied their readers with a guiding thread, viz., to go from faith to doubt and from doubt to knowledge, taking the Koran only as the starting point of this road, since it appealed to him who believed in cherished secret but not to him who understood it. For even Abraham, they said, was a prisoner of false dogmas before he knew God. The Brethren compared the truth included one way or another in false dogmas to a seed in the ground, while doubt resembled water, irrigating the land and letting the seed sprout; by overcoming false views, a person could achieve that stage when the whole world would be reflected in his soul, as in a mirror, and he would become the ruler of earth and heaven.

In logic, physics, and metaphysics the Brethren largely followed Aristotle, employing such of his concepts as substance and accidents, matter and form, potentiality *(dynamis)* and act (actuality), and the formal, material, efficient, and final causes. But the ten Aristotelian categories, the highest genera of being, served them only to describe the created world, while they regarded the Creator as a cause that was beyond being and non-being. Aristotle's *Metaphysics* was supplemented by the Neoplatonist conception of emanation: active intellect stemmed from the One, then the Universal Spirit, and then primary matter. These four entities formed the highest stage of the hierarchy of being. The middle stage consisted of nature and the absolute body, capable of taking the three dimensions. The lowest scale was formed by the heavenly sphere with the seven luminaries, four elements (earth, water, air, and fire), and the entities *(muwalladat)* generated from their mixture (minerals, plants, and animals).[13]

The specific element of the Brethren's philosophical constructs that distinguished them from other *falasifa* (with the exception of Kindi) was their broad use of Pythagorean ideas, in particular the symbolics of numbers like 4, 7, 9, 10, 12, 28. A quadripartite division of things is met particularly frequently in the Brethren's *Epistles*. They spoke, for example, of the four mathematical disciplines (arithmetic, geometry, astronomy, and the theory of music), the four groups of numbers (units, tens, hundreds, and thousands), the four members of the emanational chain (The One, active reason, the Universal Spirit, and primary substance), of the four seasons, the four corners of the world, the four elements, the four natures (heat, cold, dryness, and moisture), the four fluids (yellow bile, black bile, lymph, and blood), the four strings of the lute, and so on.[14]

These encyclopaedists' idea that man was an outsider held prisoner by nature had something in common with Platonism. The idea was reinforced by words ascribed to

Muhammed that the world was a dungeon for believers and a paradise for infidels. But Plato's epistemology was alien on the whole to the authors of the *Epistles*, who did not recognise the possibility of rational knowledge that lacked a support in sense perception. They interpreted the Platonic doctrine of knowledge as remembering in the sense that the soul was potentially the knower while its knowledge was actualised through sense perception. They also acquainted their readers with Plato's doctrine of ideas, but did not express their attitude to it.

The Brethren's ontology, as we have already indicated, rested on the conception of emanation, which presupposed that the world was not created in time. It is said in their encyclopaedia that God created the world 'at once'; in Neoplatonic doctrines this meant that no degrees of emanation existed in relation to the One (Creator); things were given in Him 'all together', and only in the created world did they form some degree or other of the hierarchy of being, depending on their closeness to or remoteness from God, since the existence of a preceding stage was a sine qua non of the existence of a following one. The Supreme Creator was in everything and together with everything, without combination and merging with things, just as unity was in each number and in each calculable.[15] The Brethren's pantheistic god could be characterised only by negative attributes; and the only mode of knowing him was to study the world, his creations, because there was a sign of the master in works of art, and in the causally realised there was a trace of the cause. The religion of philosophers consisted in knowledge of existing things, the encyclopaedists claimed.

The Brethren of Purity regarded the realm of nature as the result of a kind of development, evolution: plants arose before animals, and the first animals were the lowest living creatures endowed with only one sense formed in the slime or ooze at the bottom of the sea and the depths of rivers (crayfish, snails, and worms).[16] There were no sharp boundaries between the realms of nature: the highest degree of mineral bordered on the lowest stage of plants, the highest stage of plants on the lowest of animals, and the highest stage of unthinking animals linked up with the initial level of man. Man was the pinnacle of the development of existing things, a microworld embodying the idea of the universe as an integral formation. The Brethren likened man's organs to the heavenly bodies, the four elements, minerals, plants, and animals, and his soul to the Universal Spirit. They also regarded the world in the same way, as a macro-human, comparing thunder with human speech, light with laughter, rain with tears, night with grief, death with sleep, and so on.

The encyclopaedists also told of the development of the human race by metaphorically interpreting the story of the fall of Adam and Eve. They attributed the appearance of the first people to the area of the equator where, in their views, a temperate climate prevailed. Adam and Eve had passed their days in an 'Earthly paradise' among fragrant flowers, surrounded by peaceable animals and sweet-singing birds. But then the fall had occurred, and two were thrown out into the foothills of mountains where there was neither water, nor trees, nor shelter. When the ancestors of people had almost perished from hunger and deprivations, God sent an angel down to them who taught them to work and provide their livelihood. This angel personified the forces of nature that benefit mankind, while the devil, who refused to bow to Adam, personified the elements hostile to humanity. Adam's descendants, changing their way of life, passed from a stage of savagery to one of civilisation: life in caves gave way to life in villages and towns, hunting, cattle-raising, etc., replaced the food-gathering mode of gaining a livelihood.

Combining these guesses with ideas of a cyclical renewal of nature and society, and the dominance in turn of good and evil in society, the Brethren called the Abbasid dynasty evil and predicted the regime's natural fall. They saw it as their task to hasten its collapse by preparing the spiritual improvement of society on the one hand, and, on the other, by exposing the ulcers affecting it (greed, deceit, lies, lawlessness, and violence).

The encyclopaedists saw their union as the embryo of a future 'state of good' in which the majority of society would be represented by virtuous people striving for good as such. Their main criterion for differentiating the moral and the immoral they made the demands of reason, and not the commandments and prescriptions of the *Shari'a*, which were only necessary, from their standpoint, for those who were incapable of listening to the voice of reason and of suppressing their vicious, immoral inclinations. The prophets who brought the divine laws to people, the Brethren declared, were healers of the soul and astrologers who inspired hope in future happiness; sick and wretched people needed doctors, and people in desperation astrologers. Brethren did not experience any need of them. For those reasons the encyclopaedists considered themselves free of any obligation to pray, fast, and perform the other prescriptions of religion.

The Brethren of Purity counterposed virtuous people who unselfishly devoted themselves to serving dear ones to immoral individuals who wreaked every kind of evil on others, and hypocrites who did good deeds only in the hope of extracting definite profit for themselves from them. In the last case it was a matter of 'doers of good works' who counted on obtaining even greater recompense for their good deeds in the other world.

The esoteric content of the Brethren's doctrine, accessible to only the few members of the secret union who had reached the highest stage of initiation, was undoubtedly opposed to all revealed religions, which were treated in the encyclopaedia as the lowest stage of knowledge, surmounted and abolished in the highest stage associated with the resurrection *(qiyama)* of the simple Moslem, and with the coming of the 'hidden' imam *(al-qa'im)* of the Ismailites. But, from the philosophical standpoint, the Brethren understood this highest degree as one of knowledge of the real essence of things, purged of the last remnants of a false outlook on the world. In their meetings, which they called *majlis*, like the discussion clubs of the Mu'tazilites, the Brethren probably exposed prophets with the same fervour as the ideologists of the Qarmathian movement. But in their epistles they gave the reader information for reflection that linked up in its starting points and method with *kalam*, and in its final conclusions with *falsafa*.

THE ISLAMIC ARISTOTELIANS

The activity of the Brethren of Purity marked the beginning, if not in time then typologically, of a new page in the history of *falsafa*. The innovation was that *falasifa* regarded their science from now on as a means of transforming society and of changing its separate members according to certain scientifically substantiated models. Their interest was therefore drawn identically to both the theoretical sciences and the practical, i.e. moral and political, and their works acquired the form of an encyclopaedia like the epistles of the Brethren but more uniform because all *falasifa* were Aristotelians or Peripatetics (*al-mashsha'iyyun*—much itinerants). From now on we shall call them Islamic Aristotelians and, depending on the locality of their activity, of the Moslem East or the Moslem West.

Abu Nasr al-Farabi, nicknamed the Second Teacher (Aristotle being the First), must be recognised as the father of the Islamic Aristotelians. He was born in A.D. 870 in the town of Faraba on the Syr-Darya in the family of a Turkish commander. He got his philosophical education first in Harran, and then in Baghdad. In 942 he moved to Aleppo. Having the care and attention of the Hamdanid ruler Sayf ad-Dawla, he spent the last years of his life in Aleppo and Damascus, dying in Damascus in 950.

Farabi wrote a vast number of books, treatises, and commentaries. He was an unsurpassed interpreter of classical logic, and his was the first Islamic philosophical work devoted to classification of the sciences—*Ihsa' al-'ulum, (Survey of the Sciences)*. Continuing a tradition stemming from Simplicius, Farabi wrote a treatise *Al-Jam' bayna ra'yay al-hakimayn Aflatun al-ilahi wa-Aristutalis (Harmony between the Views of Plato and Aristotle)*, and also separate treatises devoted to the two great thinkers of antiquity. But he is most famed in the history of philosophy for treatises on ethics and politics such as *Ara' ahl al-madina al-fadila (On the Opinions of the Citizens of the Virtuous City), At-Tanbih 'ala sabil as-sa'ada (Reminder of the Way of Happiness), Politics, Fusul al-madani (Aphorisms of the Statesman),* and *Fi tahsil as-sa'ada (The Attainment of Happiness)* (the last-named, together with the treatises *The Philosophy of Plato* and *The Philosophy of Aristotle* form a trilogy). In these treatises Farabi developed a doctrine of the ideal state (taking Plato's *Republic* as his model) (the 'Virtuous City'—*al-madina al-fadila*) and of the corrupt states opposed to it ('lost' and 'ignorant' cities).

We do not have a full idea of Farabi's metaphysical views. If we discount the short treatise *'Uyun al-masa'il (Main Questions),* which is probably not his but Ibn Sina's, then only *Kitab al-huruf (The Book of Letters)* has come down to us from the works of that category; it is devoted to explaining philosophical terms, the relation of religion and philosophy, and to philosophical questions (with use of 'Who' 'Which', 'What', and other interrogatives). As for the philosophical ideas usually ascribed to him, they represent the 'views' (*ara*') of an inhabitant of an ideal state. But these views cannot by definition be the convictions of a philosopher, because the term *ara*' signifies doubtful, unreliable knowledge, close to 'opinion' (Gr. *doxa*). And in fact (as will be made clear below), he characterised the world outlook of the inhabitants of the 'Virtuous City' as a 'virtuous', i.e. ideal, religion *(al-milla al-fadila)* that 'imitated' true philosophy.

When describing this religion al-Farabi introduced into Islamic philosophy, for the first time, the conception of emanation and the division of things into possible existent and necessary existent. (Strictly speaking, the commonly used translation of these very important terms *mumkin al-wujud* and *wajib al-wujud* as 'possible existent' and 'necessary existent' is incorrect. We get 'impossible existent', which embodies a flagrant *contradictio in adjecto.* The false translation can suggest a distorted idea of the world outlook of a philosopher who uses these terms, since 'being' or 'existence' would then function as a genus divided into species, and instead of the monistic view of being we would have a dualism of necessary and possible existent, i.e. theism instead of pantheism, since the possible existent would be identified in the religious context with creation, and the necessary existent with the Creator. But in the Peripatetic philosophy there is a proposition that being is indivisible into any kind of genera and species.) The picture of the emanational origin of what exists from a single first principle, painted in the ideal religion, was meant to serve as a paradigm of the social structure of a society governed by a philosopher king who, at the same time, performed the function of an imam, the head of the religious community.

The bibliographical work of the Turkish scholar Hajji Khalifa (1608-1657) contains an indication that Farabi had written an encyclopaedic work entitled *At-Ta' lim ath-*

thani (The Second Teaching), which became the prototype of the fullest exposition of the Islamic Aristotelians' philosophy, namely Ibn Sina's *The Book of Healing*. It was thanks to *The Book of Healing* that their philosophical system received its present reconstruction.

Abu-'ali Ibn Sina (latinised as Avicenna) was born in the village of Afshan near Bokhara in A.D. 980. His youth passed in Bokhara, capital of the Samanids' domain, but after the death of his father and the fall of Bokhara into the hands of the Karakhanids, he moved to Gurganj, and then he lived in Gurganj, Raiy, Hamadhan, and Isfahan, occupying the post of vizier and physician of the local rulers. He died in Hamadhan in 1037. In addition to *The Book of Healing*, Ibn Sina also wrote less extensive encyclopaedic works *The Book of Salvation*, *The Book of Demonstrations and Affirmations* and *The Book of Knowledge* (the last in his mother tongue Parsi). In addition he was the author of the *Canon of Medicine*, which was a digest of the medical knowledge accumulated at that time and of his own observations as a medical practitioner. He also wrote the allegorical stories (or treatises) *Hayy ibn Yaqzan*, *The Treatise of the Bird*, and *Salaman and Absal*, which form a kind of philosophical trilogy.

Ibn Sina included Farabi's doctrine of the 'virtuous city' in his teaching, but refrained from writing a special work on political science. The reason for that, seemingly, was the unfavourable political situation that characterised the struggle of the powerful Ghaznawids with the Ismailites, whose ideology had absorbed political utopias similar to the theories of the ideal state of Farabi and the Brethren of Purity. He developed Farabi's practical philosophy, however, in the current of a rationalist treatment of prophethood. In order to maintain life, he argued, people had to unite in an association or community. Law was needed for that, and someone who would oblige people to obey it, because otherwise discord would arise among them and each would consider just that which was profitable to himself and unjust that what was unprofitable and disadvantageous to him.[17] Such a man should be a prophet who informed people that they had a certain, omnipotent, single creator, but about whom he should not burden simple folk with information over and above the knowledge that he was one, true, and peerless.[18] Following Farabi, Ibn Sina also argued about emanations, but the conception of emanation was not an invariant element of his metaphysics; in his late encyclopaedic work *Kitab al-Isharat qa-l-tanbihat* (*The Book of Directions and Remarks*), a description of the degrees of approximation of Sufi-gnostics to divine knowledge took the place of this conception.

It was assumed for a long time that Abu Hamid al'Ghazali had put an end to the development of *falsafa* in the east of the Moslem world by his book *The Incoherence of the Philosophers (Tahafut al-falasifa)*. The assumption is false in several respects. (1) Ghazali did not desire an end of philosophy. Furthermore, he did not set himself the aim in his polemic even of refuting the philosophers. Speaking in the name of Ash'arites, he did not touch on the essence of philosophy but only demonstrated the inconsistency of Ibn Sina, who had tried to combine the requirements of theoretical reason and of practical reason (religion), but had only succeeded in infringing the rigorous proof of the theoretical sciences and the sanctity of the fundamental dogmas of religion. Ghazali criticised the *falasifa* on 20 points. On three, he considered, they opposed the unambiguous propositions of Islam and their corresponding theses were heretical. These included Ibn Sina's proposition about the eternity of the world, the non-dissemination of divine knowledge in single subjects, and the impossibility of resurrection of the body. On the other points he reproached the Avicennists of inability to prove the existence of God, to advance arguments that witnessed to the impossibility of the existence of two divinities, and to show that the First Being was not a body, and of inability to affirm that the First Being knew something apart from itself, knew itself, and so on. (2) After the death of Ibn Sina the school he created endured for many more generations, so that the chain of his successors in it could be traced through his pupil Bahmanyar, and the latter's pupil Lawqari, to Nasir ad-Din at-Tysi (d. 1273). The subsequent development of the Islamic Aristotelianism in the East was characterised by its gradual approach to and merging with *kalam*.

Islamic Aristotelianism survived for a short but glorious time in the west of the Moslem world (in al-Andaluz and the Maghreb). The founder of the Andalusian school of Aristotelianism was Abu Bakr Ibn Bajja (latinised as Avempace). Ibn Bajja was born in Saragossa at the end of the eleventh century, lived in Seville, Granada, Saragossa, and towns of the Maghreb, twice held the post of vizier, was persecuted more than once, and accused of heresy. He died in Fez, poisoned by opponents. His main philosophical works were *Farewell Epistle*, *Epistle on the Union of Intellect and Man*, *The Book of the Soul*, and *Tadbir al-mutawahhid (The Rule of the Solitary)* and commentaries on Aristotle's scientific works and Farabi's works on logic. Ibn Bajja's philosophical ideas were uncoordinated, but tended on the whole to philosophical anthropology. The essence of man, who in his individual development passed through a vegetative stage (in his mother's womb), an animal state, and human one proper, consisted, according to Ibn Bajja, in his rationality, and his goal in a combination with active intellect, the principle of the shaping of form and orderliness in this world. Since the subject was identified with the object in the act of thinking, human reason, which passed from a potential to an actual state, was one for all people, in the same way as the property of a magnet was the same for all parts of magnetised iron, and was differentiated in individuals only through union with matter and their various ways of achieving intelligible forms. Ibn Bajja treated the combination with active reason as a result of the ascent by degrees of 'spiritual forms', which included: (1) the images contained in common sense, imagination, and memory; (2) material forms abstracted from individual objects, (3) active intellect and the acquired reason that ensured a union with it; (4) the forms of celestial bodies.[19] He divided people, in accordance with their capacity for abstract thought of one level or another, into (1) the broad public, the masses, who employed mentally comprehensible forms in practical arts; (2) 'speculators' who relied on abstractions, but still in their correlativity with sense objects; (3) the 'blissful one' who renounced the sensual world and were united with active intellect.[20]

Ibn Bajja counterposed the state of the 'blissful', which he identified with the religious concept of the otherworldly life, to the unity with the divinity that

Sufi-mystics talked about. He reproached the latter that they substituted imaginative understanding for rational knowledge, and declared the end of knowledge to be pleasure, which in reality could only accompany knowledge but could not be its aim. The philosopher who was united with active reason was a stranger in an imperfect society, but he and those like him, living the life of a 'solitary' *(mutawahhid)* in such a society personified the perfect society or 'virtuous city', a feature of which was absence of the art of healing and of the art of legal procedure.[21]

Ibn Bajja, who was influenced by Farabi (he never mentioned Ibn Sina in his works), in turn influenced a second spokesman of Andalusian Aristotelianism, Ibn Tufayl. Abu Bakr Muhammed Ibn Tufayl was born at the beginning of the twelfth century in the fortress of Barshan near the town of Wadi-Ash (modern Quadix), lived in al-Andaluz and North Africa, and died in Morocco in 1185. He held the posts of vizier and court physician in the courts of the Almohad Caliphs Abd al-Mumin and Abu Yaqub Yusuf; not long before his death he gave up the place of personal physician of the Caliph to Ibn Rushd, while retaining the post of vizier. Ibn Tufayl was a man of broad intellectual and artistic interests (in particular he expressed ideas in astronomy that ran counter to the Ptolemaic system generally accepted at the time) but, if we do not count several examples of poetic art, we have only the romance *Hayy ibn Yaqzan (Alive Son of Awake)* from all his scientific, philosophical, and literary legacy. One can say with confidence that the allegorical Crusoe-story in the romance was a further development of the theme of the 'rule of the solitary' in the work of Ibn Bajja.

On an uninhabited island near the equator, Ibn Tufayl related, there arose a human child, spontaneously generated from the womb of nature herself, which was fostered by a gazelle that had lost its kid. Hayy ibn Yaqzan—so the boy was called—was left alone in the wild after the death of the gazelle. He was compelled to learn how to make various tools and weapons by means of sharp stones, and to master fire. His way of life, food, clothing, and shelter were altered.

From the narrative of the mastering of nature by human hands there naturally stemmed a story of knowledge of the physical, and then of the metaphysical worlds by human reason. Hayy's abstract thinking was moulded by experiments he performed on the dying gazelle, to understand the principle governing the vital activity of the organism. In understanding what existed Hayy worked out a rule of life accordant with nature, developed a kind of ecological ethic for himself, and learned how to put himself into an ecstatic state that enabled him to experience absolute unity of being. In other words, Hayy became a Sufi-gnostic.

At that stage Ibn Tufayl acquainted Hayy with Absal, inhabitant of a neighbouring island, who had decided to pass the rest of his life in solitude and prayer. Absal tought Hayy his own language, and discovered in talks with him that the dogmas of the religion common in his mother country, when correctly interpreted, coincided with the outlook of the world that Hayy had arrived at guided by the natural light of reason. As for Hayy, Absal's religion evoked only bewilderment in him. Why, he asked, had the prophet who brought this dogma to people, not wanted to disclose the truth as it was? Why did he resort to all kinds of tales and fantasies? Crossing over to Absal's island with the latter, Hayy spent many hours in learned discussion with its inhabitants and their ruler Salaman. But philosophical wisdom, alas, was not understood by anyone, and even evoked hostility among Hayy's interlocutors. Convinced that these people were at the level of irrational animals, the unlucky enlightener decided that there was no other road to salvation for them but belief in the myths of traditional religion. Hayy and Absal returned to the uninhabited island, where they lived out the rest of their lives.

Hayy ibn Yaqzan was the personification of naturally developing humanity and the natural light of reason, that adequately understood being and so identified with active intellect; Salaman was the personification of the 'masses', capable of understanding the sacred texts only in the literal sense, while his subjects were personifications of Farabi's 'ignorant' and 'errant' cities. Absal incarnated that part of the people who were capable of a metaphorical interpretation of the sacred texts and of abstract thought. The whole narrative represented a symbolic, allegorical rendering of the essence of Ibn Sina's philosophy, who had himself set out his views in a similar form in three allegorical treatises whose characters provided the names of the personages of Ibn Tufayl's story. In the description of Hayy's development as the personification of humanity in its gradual development, moreover, there is clearly to be felt a reminiscence of the evolutionism of the Brethren of Purity; and, in the idea of the possibility of attaining truth without the aid of prophets and revelation, and of life in accordance with nature in isolation from the surrounding imperfect society, one feels the influence of Ibn Bajja's doctrine of the 'solitary'.

Enjoying the intimacy of the Caliph Abu Yaqub Yusuf, Ibn Tufayl once presented his young friend Ibn Rushd to the commander of the faithfuls; Ibn Rushd was set the task, by the Caliph, of writing a commentary on the works of Aristotle. So began the fame of the greatest spokesman of Islamic Aristotelianism, who was given the honorary sobriquet in Europe of 'The Commentator'.

Abu al-Walid Muhammed ibn Ahmad Ibn Rushd (latinised as Averroes) was born in Cordoba in 1126 in a family of hereditary judges *(qadi)*. He lived in Andalusia and Morocco, held the post of a judge and of court physician, and not long before his death was disgraced along with certain other members of the Andalusian intelligentsia. He died in Morocco in 1198. Ibn Rushd's works were devoted to philosophy, natural sciences, jurisprudence, and medicine. In form they are divided into commentaries and independent works. He compiled commentaries on the works of Aristotle, Plato *(Republic)*, Alexander of Aphrodisias *(On Intellect)*, Nicholas of Damascus (*The First Philosophy*), Farabi (treatises on logic), Ibn Sina *(Canon of Medicine)*, and Ibn Bajja *(Treatise on the Union of the Intellect with Man)*. Most of these works were an interpretation of almost all the works of Aristotle except the *Politics*, which was not available to Ibn Rushd.

Ibn Rushd interpreted Aristotle's works in the form of brief, medium-length, and major commentaries. As for his own original philosophical works, the most important is the treatise *The Incoherence of the Incoherence*, written around 1180, in which he examined (also in the form of a commentary) the content of Ghazali's *The Incoherence of the Philosophers*, with the aim of defending philosophy against Ghazali's critique. In his polemic (with citations from the interpreted work and an alternation of cited excerpts and glosses) Ibn Rushd was sharp and sarcastic, but now and then notes of distress are heard that a man of such broad erudition as Ghazali could stoop to methods of disputation unworthy of a scholar, in order to defend obviously false views. And then he sought justifications for his opponent in objective causes: 'perhaps the man may be forgiven on account of the time and place in which he lived'.[22] No less sharp objections are addressed to Ibn Sina for his retreat from the positions of the *falasifa*. Ibn Rushd's *Decisive Treatise (Fasl al-maqal wa-taqrir ma bayn al-shari' a wa-l-hikma min al-ittisal)* and its Supplement, and his *Disclosure of the Method* (of giving reasons for dogmas) *(Kitab al-kashf 'an manahij al-adilla)* are important for understanding his point of view on the relationship of belief and knowledge.

In order to understand the essential difference of his philosophy from the views of Farabi and Ibn Sina, his commentary on Plato's *Republic* is of great importance; in it he shared his own view of the ideal state. In Farabi's ideal state, for instance, the philosopher-ruler was allotted the functions of spiritual leader of the community; as a philosopher he cognised the principles governing the natural and human world by uniting with active reason, but as imam he passed on the truths so obtained to the "multitude" in the evocative, symbolic form of an ideal religion that 'imitated' philosophy.

In Ibn Rushd's ideal state the philosopher-ruler did not fulfil such functions. He therefore did not have, in particular (in contrast to the ruler of Farabi's 'virtuous city'), a well-developed imagination as a necessary quality. For the art of preaching, the aim of which was to convince the masses of something by means of graphic images affecting the emotional strings of the soul, served as the paradigm of religion. The explanation of that can be found in *The Incoherence of the Incoherence*, in which he opposed a religion *(shari'a)* based only on reason. Ibn Rushd gave preference to traditional religion, since any revealed religion aimed at fulfilling practical ends was built one way or another on a rational basis ('reason was added' to it), while an artificially created religion, based on reason alone, i.e. a religion that imitated philosophy, could not affect the masses as effectively as a religion based on Revelation.

> Therefore [he said] the learned who were instructing the people in Alexandria became Muhammedans when Islam reached them, and the learned in the Roman Empire became Christians when the religion of Jesus was introduced there.[23]

For every prophet is a sage, but not every sage is a prophet.[24]

Part II
NOTES TO CHAPTER 5

[1] See: Al-Kindi. *Rasa'il al-Kindi al-falsafiyya*, Vol. I (Dar al-fikr al-'arabi, Cairo, 1951-3), p 105.
[2] *Ibid.*, p 103.
[3] *Ibid.*, p 102.
[4] *Ibid.*, pp 103-104.
[5] See: extract from al-Biruni's *Al-Athar al-baqiyya 'an al-qurun al-khaliyya* in: F. Rosenthal (Ed. & translator). *Ahmad b. at-Tayyib as-Sarahasi* (Yale U.P., New Haven, Conn., 1943), pp 122, 123.
[6] See: al-Biruni. *Op. cit.*
[7] See: Abu Bakr ar-Razi. *Rasa'il falsafiyya* (Dar al-afaq al-jadida, 1973), p 195.
[8] See: A.T. Arberry. *The Spiritual Physick of Rhazes* (John Murray, London, 1950).
[9] Abd ar-Rahman Badawi. *Min tarikh al-ilhad fi-l-islam* (Maktabat an-nahda al-masriyya, Cairo, 1943), p 207.
[10] *Ibid.*, p 211.
[11] *Ibid.*, p 220.
[12] At-Tawhidi. *Al-Muqabasat* (Al-Maktaba at-tijariyya, Cairo, 1929), p 45.
[13] *Rasa'il Ikhawan as-safa*, Vol. III, p 202.
[14] *Ibid.*, Vol. I, p 53.
[15] *Ibid.*, Vol. III, p 348.
[16] See: *Ibid.*, Vol. II, pp 180-181.
[17] Ibn Sina. *An-Najat* (Matba'at as-sa'ada, Cairo, 1938), p 303.
[18] *Ibid.*, p 304.
[19] See: *Rasa'il Ibn Bajja al-ilahiyya* (Dar an-nahar, Beirut, 1968), p 49.
[20] See: Ibn Rushd. *Talkhis kitab an-nafs* (Maktabat an-nahda al-misriyya, Cairo, 1950), p 90.
[21] *Rasa'il Ibn Bajja al-ilahiyya,* p 41.
[22] Simon van den Bergh. *Averroes' Tahafut al-Tahafut* Vol. 1. (Luzas& Co., London, 1954), p 16.
[23] *Ibid.*, p 360.
[24] *Ibid.*, p 361.

6

Theory and Practice

THE RELATIONSHIP OF PHILOSOPHY, THEOLOGY, AND RELIGION

Theoretical reason, according to the Moslem Aristotelians, was related to practice in a dual way. On the one hand it was linked with the 'practical arts' *(sina'a amaliyya)* such as medicine, agriculture, and navigation, and on the other hand was called upon to control the activity of practical reason in spheres of the practical sciences 'within its jurisdiction' *('ulum 'amaliyya)*, viz., ethics, economics, and politics.

The relationship of belief and knowledge had a central place in problematic of the interconnections of theoretical and practical reason, and it reflected the whole complexity of these interconnections due to the non-coincidence of these two aspects of human existence, which were revealed in the dual definition of man as a rational being and a civic ('political') being; Aristotle's demarcation of these was the first to single out clearly the two functions of thought—the theoretical, directed to attaining reliable knowledge, and the practical, which consisted in providing people with a good life by regulating their everyday actions and relations, which was only realisable in mediaeval conditions when the normative principles of ethics and politics were hallowed by religion.

The Islamic Aristotelians' discussion of the relation of belief and knowledge were carried on in the field of the interpretation of the five 'syllogistic arts', or methods of argument, viz., apodeictics, which was an exclusive achievement of the *falasifa*, dialectics and sophistics, which underlay theology (which they called *kalam*, interpreting this word in a broadened sense), and rhetoric and poetry, which formed the foundation of religion.

We shall deal with this in the chapter on their logic;

here we shall outline Farabi's short description from his *Risala fi qawanin sina 'at ash-shi'r (Treatise on the Canons of the Art of Poetry).*[1]

From the angle of cognitive value, Farabi declared, apodeictic arguments ranked the highest of these arts, since they were 'absolutely true'.

Next came dialectical arguments, which were 'true in the main' since they constituted the core of carrying on discussion—dialogues on the basis of probability, 'generally accepted' propositions. The dialectic was not capable in itself of yielding reliable, authentic truth, but it was needed so as to gain the upper hand over an interlocutor in 'generally accepted and known subjects', mainly religious and moral ones.

Rhetorical arguments were 'equally true and false', and were resorted to when one wanted to convince someone of something (but not prove it) and to 'placate the soul' of hearers without achieving reliable knowledge.

Sophistical arguments were 'in the main false'. The sophist tried to win a 'pseudo victory' *(ghalaba maznuna)*, to bemuse the hearer, to put him off the track, and to deceive him by presenting the true as false and vice versa.

The lowest rung was occupied by poetic arguments; they were 'absolutely false' since they dealt not with objects that themselves really existed 'outside the mind', but with 'fictions'—images resulting wholly from the speaker's phantasies and intended to affect, not the intellect, but the imagination, and through it listeners' emotions.

The syllogistic arts, i.e. the arts in which the employment of syllogisms was the 'final activity', Farabi said in his *Book of Letters*, arise at that stage of the development of public life when people, having acquired skills in the 'practical arts' began to experience a desire to understand the causes of the objects and phenomena around them. Thought aimed at satisfying that wish evolved, passing through several stages, and rising from less reliable knowledge to more reliable.

The first stage of knowledge was characterised by use of poetic and rhetorical arguments, which resulted in the appearance of very different opinions. By everyone defending his point of view, people learned to employ two other methods—the sophistic and the dialectical—which had a great similarity to one another, often merging and being put to use simultaneously. But a time came when people began to use sophistics solely in order to clarify the thoughts expressed, so that dialectic became the main method of argument. In time, however, dialectic, too, displayed specific shortcomings; when brought to perfection it demonstrated, by its own means, the impossibility of employing it to attain reliable knowledge. In the searches for more perfect methods of studying reality people came to work out a universal practical and theoretical philosophy based on evidence and proof.

People could be familiarised with the propositions advanced by philosophy in two ways: (1) by means of the apodeictic arguments proper to *falsafa*; and (2) by means of dialectic, rhetoric, and poetic images. The first way was followed when it was a matter of the 'chosen' few, and the second when appealing to the 'broad public'. In order to convince the latter of some proposition of a theoretical or practical character, previously established by apodeictic arguments, rhetorical and poetic speech was specially resorted to.

Farabi interpreted religion as an 'imitation' of philosophy. In the 'virtuous city', i.e. in the ideal society, there was established a realm of the 'correct religion', which 'imitated' true philosophy. This religion should transmit to the citizens, in intelligible symbols and by means of persuasive expressions, views developed for them by philosophers from reliable premisses by means of apodeictic arguments. A purely apologetic role was assigned to theology in this society; it was called upon to limit itself to defending the views decreed by the philosopher-rulers, but not to display excessive initiative in doing so. It was to function, together with religion, as the handmaid of philosophy. In *The Book of Letters*, furthermore, we read that as soon as theology became a servant of religion, and religion occupied the same position in respect of philosophy, the relation of theology to philosophy found expression in its being in some way a handmaid serving the latter through the medium of religion.[2] Such a doctrine could only have arisen when the Near and Middle East were embraced by Shi'ite-Ismailite movements that presaged a rapid fall of the Abbasid Caliphate—'the kingdom of evil' founded on a 'false religion', and consigning theoretical and practical virtues to oblivion. Farabi's 'virtuous city' was not a pure utopia; the model of an ideal society created by him had real parallels, though not so perfect, in the Qarmathians' state in Arabia and in the Fatimids' regime in Egypt. The latter, history showed, did not justify the hopes placed in it, but the ideal itself was preserved, and for centuries fed utopian socio-political doctrines that arose in the various ends of the mediaeval Moslem world. One of the closest followers of Farabi's teaching on the 'virtuous city' was Ibn Sina, who also (as we shall see below) continued his theory of the relation of philosophy, theology, and religion.

But in the west of the Islamic world, in al-Andaluz and the Maghreb, where almost full unanimity prevailed, no preconditions arose for dreams of a state founded on some new, 'correct' religion—the 'imitator' of true philosophy. That found reflection, as we noted above, in the works of all three great spokesmen of Aristotelians in that region, but was expressed in clearest form in Ibn Rushd's doctrine of the relation of philosophy, theology, and religion.

In his *Decisive Treatise*, he formulated his task in terms of *fiqh* (jurisprudence).

> The purpose of this treatise is to examine, from the standpoint of the study of the Law, whether the study of philosophy and logic is allowed by the Law, or prohibited, or commanded—either by way of recommendation or as obligatory.[3]

The proof that study of philosophy was not only not contraindicated for Moslems but was prescribed for them by Allah Himself, was built on two foundations.

(1) The Koran made it the duty of Moslems to study the world around them because only by penetrating to the essence of things as God's creations could their Creator Himself be comprehended. Many verses of the Scripture spoke of that.

(2) The most perfected means of studying the world was that which deduced the unknown from the known by means of proofs. And it was precisely that which the *falasifa* were concerned with, employing the best form of argument, the apodeictic (demonstrative) syllogism.

Since the ancient sages who laid the foundations of philosophy pursued the same goals that the Koran called upon believers to attain, it followed that study of philosophy and the classical thinkers was something prescribed by Islam itself. And from that it followed that the *falasifa* were the sole category of persons empowered to interpret sacred texts. The direction such interpretation should take is clear from Ibn Rushd's words:

> So we affirm definitely that whenever the conclusion of a demonstration is in conflict with the apparent meaning of Scripture, that apparent meaning admits of allegorical interpretation.[4]

On the whole Ibn Rushd created a scheme of the relation of philosophy, theology, and religion with five methods of argument, or 'syllogistic arts', in the form they had been expounded by Farabi, and after him Ibn Sina. According to Ibn Rushd *falsafa* was the highest type of arguments based on demonstration, and only he who naturally possessed the appropriate talents and had the necessary scholarly training could be a philosopher. In order to conduct dialectical discussions, it was sufficient to be a dialectician by nature or by nature and skill; in order to marshal rhetorical judgments it was simply necessary to be a reasonable man. (Ibn Rushd spoke only of 'apodeicticians', dialecticians, and rhetoricians, since poetry and sophistics could not, by their nature, have any essential relation to truth.)

Rhetoricians, who formed the 'broad public', presented no danger to the well-being of society so long as they were content with the literal sense of a dogma, but dialecticians, i.e. theologians, in his opinion, were constantly threatening to plunge society into an abyss of hatred and wars, since their doctrines were based on 'generally accepted' opinions and relied on arguments fraught with the development of ever new schisms and sectarian movements. Correspondingly, there was nothing for dialecticians to do in the ideal society. Ibn Rushd recommended the chiefs of Moslems to ban theological works, pointing out at the same time the perniciousness of divulging the content of philosophical doctrines to the multitude; philosophers should not undermine the religious ideas dominant in society either positively or negatively, and were obliged to keep their doctrines to themselves sharing only those with the multitude whose sense did not contradict current views when they were directed to the good of society.

The views of Islamic Aristotelians on the relation of belief and knowledge started from notions that religion was a 'political', i.e. practical, art needed in society insofar as most people were incapable of mastering the abstract truths of philosophy. Theology had no right to impose its doctrines on people, since its tenets were based on probability premisses and opinions. Only philosophy constituted the field of intellectual activity in which the truths of theoretical and practical reason were disclosed. But it should not openly oppose itself to religion; and philosophers should follow the generally accepted norms of behaviour and refrain from divulging their views to the multitude, expounding them, when necessary, in a form inaccessible to the understanding of the uninitiated or not contradicting the literal sense of the main dogmas of religion.

It could consequently not be a matter here of any 'two truths', 'dual truth', or 'double truth'. Philosophy and religion were linked by a relationship that consisted in both being concerned with interpreting the utmost foundations of being. But their kinship was purely nominal and not a blood relation; religion, according to Farabi, was the step-daughter (not the daughter) of philosophy and, according to Ibn Rushd, its foster-sister (and not its real sister). Science and religion were alien to one another, just as reason, relying on trustworthy premisses, and belief, based on opinion and imaginary models, were alien to one another.

What then was the 'ideal' religion on which Farabi wanted to build the 'views' of the inhabitants of the 'virtuous city', and which Ibn Rushd and other philosophers of Islamic Spain rejected the very idea of?

To answer that we must turn to the fate of this component of the philosophy of the Islamic Aristotelians, because of which it came to be called Islamic Neoplatonism.

In the widely held view of Islamic Aristotelianism as a product of the blending of Neoplatonism and Aristotelianism through mediaeval Moslem philosophers' acceptance of the so-called *Theology of Aristotle* as a genuine work of his, the history of the development of this trend is presumed to be as follows: the *Theology*, translated for Kindi by his pupil Abd al-Masih al-Himsi, was accepted by everyone as a genuine work of Aristotle's, and Farabi was no exception in that sense. By introducing the doctrine of emanations set out in the *Theology* into Aristotelianism Farabi created an integral system, and laid the foundations of Islamic Aristotelianism as a distinctive philosophical system. Ibn Sina developed details of the system received from Farabi, and gave it an encyclopaedic scale; and only in the twelfth century did Ibn Rushd succeed in purging Aristotelianism of the Neoplatonic admixtures foreign to it; since this thinker was as great an interpreter of Aristotle as Aristotle was of Nature.

But the question arises: why were Ibn Rushd's predecessors who were no less penetrating thinkers, unable to do what he did, although, other things being equal, they had more possibilities of both an objective and subjective character for ridding Aristotle's teaching of extraneous elements, namely, a broader range of sources and literature, communion with members of the translation movement, who knew Greek, absence of pressure from the tradition of reading Aristotle in the light of Neoplatonism, and so on?

Farabi wrote three works that contained a list of Aristotle's works: *Ihsa' al-'ulum (Survey of the Sciences)*, *Fi ma yanbaghi an yatawaddam ta 'llum al-falsafa (The Prior Study of Philosophy)*, and *Falsafat Aristutalis (The Philosophy of Aristotle)*. In none of them is either the *Theology of Aristotle* or any other Neoplatonic work of a metaphysical content mentioned. There is a treatise on a similar theme by Kindi—*Risala fi kammiyat kutub Aristu wa ma yuhtaju alay-hi takhsil al-falsafah (On the Number of Aristotle's Books and What Is Required for the Study of Philosophy)*. In it, too, there is no mention of Neoplatonic works ascribed to Aristotle. Consequently none of the *falasifa* who were the sources of Islamic Aristotelianism, confused Aristotle's works with ones containing the emanational theory.

As the source confirming that Farabi confused Aristotle's ideas with Neoplatonic ones is usually taken his treatise *Kitab al-jam' bayna ra'yay al-hakimayn aflatun alilahi wa-aristutalis (The Harmony between Plato and*

Aristotle), in which the *Theology* is actually ascribed to Aristotle. But from the very first lines Farabi quite clearly hints that he is relying in this case on 'generally held opinions', and that he undertakes to 'reconcile' Aristotle and Plato for utilitarian purposes. From the arguments contained in this work it is clear that such was his aim, but in the first place it consisted in harmonising Plato's creationist doctrine with Aristotle's theory of the eternity of the world by means of the conception of emanation of the existent from the One associated with the *Theology of Aristotle*. This means that he included this treatise itself among works that did not adequately express his views, which is also supported by his pointing out that he was setting himself a practical task.

So why was it necessary for Farabi to harmonise the creationist outlook with the world outlook based on recognition of the eternity of the Universe, and in that connection to ascribe to Aristotle a work that was not his?

In order to answer that we must remember the political situation that had built up in Farabi's day, which we mentioned above. The authority of the Caliph hardly extended beyond Baghdad then. Outside it the anti-Abbasid movement was spreading, which was trying to put an end to the Sunnite state. The Shi'ite sects heading this movement had created their own state formations under slogans of doctrine hostile to Sunnism, in the main, not sectarian, however, but on the contrary universalist, since the ideologists of these movements were interested in drawing in forces opposed to Sunnism irrespective of the private convictions of their members. This universalism opened the way, for the first time, for involvement of philosophy in political life and for the creation of a theory of a state governed by a philosopher.

The very titles of Farabi's works usually cited during expositions of his philosophy, reveal the direct influence of this period on the practical direction of his work. The conceptions set out in them have a normative character which also appears, in particular, from the title of *The Virtuous City* and from the theses of its sections: 'On the thing on which it is necessary to have conviction that it is God', 'On how objects should be described about which it is necessary to say that they are angels', and so on. It is in this category of Farabi's works that we find the conception of emanation, and along with it the theme of 'practical sciences'.

Historians of Islamic philosophy have long expressed surprise as regards Farabi's *Virtuous City*, that its author began his account of the ideal state with questions of metaphysics, and that the first 26 chapters of this book, seemingly political in content, are devoted to speculative problems, and only the last 11 chapters to politics proper. The bewilderment caused by this is quite legitimate since metaphysics belongs to the field of the theoretical sciences, and not practical ones like politics and ethics.

This anomaly forces us to compare it with another one we meet in Farabi's books devoted to the corpus of Aristotle's works; in some of Farabi's writings the *Metaphysics* is unexpectedly omitted from the list of Aristotelian works, and, moreover, works about the practical sciences are not listed by name. This creates an impression that Farabi had doubts when compiling the lists: should they include the *Theology of Aristotle*, of the apocryphal character of which he was of course convinced? And if he included it, then should it be classed as metaphysics? Then he could not remain silent about the *Theology*, or as politics, then he would have been forced to admit openly that it did not have a theoretical character.

If such wavering and hesitation did in fact, occur, it would have been quite justified, since the emanation doctrine in the *Theology* actually had a partly theoretical, partly practical intention. Because it was that 'correct' religion that imitated true philosophy in Farabi's ideal state, and which, in making a hierarchy of the existent, put forward a universal paradigm on which the structure of the 'virtuous city' headed by a philosopher-ruler should be based. The philosopher-ruler, by making contact with the universal intellect, transmitted the truths he comprehended to the multitude in symbolic figures of speech, for which a necessary quality of the ruler, apart from wisdom, had to be mastery of outstanding phantasy (imagination). This 'correct' religion consisted of theoretical and practical parts, and their place in philosophy could be determined by reference to the classification of the sciences worked out by the Second Teacher.

THE CLASSIFICATION OF THE SCIENCES

The Islamic Aristotelians followed Aristotle in their classification of the sciences, and equally the compiler of the corpus of his works (Andronicus of Rhodes, or possibly an earlier Peripatetic), who arranged them in accordance with the division of philosophy into logic, physics, and ethics made by the Stoics. Andronicus apparently treated the works included in the *Metaphysics* as supplementary to the books on physics, and throwing light on the fundamental problems of the doctrine of nature, and put book *lambda* (λ), in which the conception of the First Mover was set out, at the end as a treatise ensuring the transition from physics to ethics (the last two books M and N were counted as later insertions). That interpretation fully corresponds to the point of view of the Islamic Aristotelians in assigning Book XII to the *Metaphysics*, the content of which they treated, along with the content of the *Theology of Aristotle*, as a part of metaphysics ensuring tie-up of the theoretical sciences that studied things whose existence did not depend on human activity and were directed to attaining truth (physics, mathematics, metaphysics) with the practical sciences that studied human activity and were directed to achieving the good (ethics, economics (*oikonomia*), and politics).

The earliest classification of the sciences worked out by Farabi, like that put forward by Ibn Miskawayh, goes back to Paulus Persas (sixth century A. D.), a Nestorian philosopher who worked in the court of Khusrau I. He, in turn, relied on Alexandrian commentators, primarily Elyah and David, the pupils of Olympiodorus.

Farabi divided the sciences into five major parts: (1) linguistics; (2) logic *(Categories, De interpretatione, Analytics* apodeictics, topics, sophistics, rhetoric, and poetics); (3) mathematics (arithmetic, geometry, optics, astronomy, the theory of music, the science of weights, and mechanics); (4) physics *(Physics, De caelo, De generatione et corruptione), Meteorology, Minerology,* (*De plantis, De naturis animalium, De anima*) and metaphysics (a subdivision on existent things and things attendant on them; a subdivision on the principles of the partial theoretical sciences; a subdivision on the first being and the degrees of things originating from it); (5) politics, *fiqh*, and theology (*kalam*).[5]

In Farabi's classification (in which, following the custom adopted by commentators, the separate disciplines often bear a title coinciding with the titles of Aristotle's works, or ones attributed to him), metaphysics occupies an intermediate place between physics and the practical sciences, in which, apart from politics, Farabi included theology (*kalam*) and jurisprudence (*fiqh*). Metaphysics was linked, moreover, with politics, *fiqh*, and *kalam* by its part that coincided in content with the ideas of the *Theology of Aristotle*. In the work on the 'virtuous religion' (*Al-milla al-fadila*), he dwelt on this in more detail: the practical, legal part of the ideal religion (i.e. relating to *fiqh*) was subordinated to the practical philosophical sciences, and the speculative part (relating to *kalam*) to metaphysics.

Thus theology (*kalam*), as was stressed in the *Book of Letters*, served as the handmaid of philosophy, through the medium of the 'virtuous religion'. As to what this 'virtuous religion' was, Farabi's classification gave an unambiguous answer: it was the Neoplatonic doctrine of the First—Arche (necessarily existent—*wajib al-wujud*) and the emanation of existing things from it (possibly existent—*mumkin al-wujud*). Insofar as religion was a 'political art' the status of metaphysics proved ambiguous: from the standpoint of its first two parts it should have belonged to the theoretical sciences, but from the standpoint of the third to the practical ones.

Farabi's classification is also indicative from the standpoint of interest in the practical, productive aspects of science, received from the Hellenistic tradition; this feature of Islamic philosophy stands out more prominently, however, in the classification developed by Ibn Sina.

In Ibn Sina's classification the sequence of the theoretical sciences (physics, mathematics, and metaphysics), which are characterised respectively as the lowest, intermediate, and highest (or 'divine'), is determined by the degree of their connection with sense perceived objects and their motion: of these three sciences (he wrote) that of nature was closest to people and their understanding, but very much in it was unclear; less was unclear and muddled in mathematics, because it was remote from movement and change; the subject matter of metaphysics, however, was intelligible immobile things—the existent as such, and its states that were inseparably inherent in it.[6] The connection of the theoretical sciences with the 'practical arts' was realised by singling out of the primary and the secondary in the sciences, or as it would now be put, of pure (fundamental) and applied disciplines.

Pure physics included disciplines that studied existing objects in general, matter, form, motion, and the First Mover; simple bodies of the sublunary and supralunary worlds and their inherent forms of motion; generation and corruption; the influence of heavenly bodies and phenomena on terrestrial life; minerals; plants; animals; the vegetable, animal, and human soul. Medicine, astrology, physiognomy, the interpretation of dreams, the science of talismans, and the science of wizardry and alchemy came into applied physics. Pure mathematics included arithmetics, geometry, astronomy, and the theory of music. The Indian decimal system of counting and algebra were associated with pure arithmetic as its applied disciplines; the science of measuring areas, mechanics, the arts connected with the making of weights and scales, marking-out instruments, optical instruments and mirrors and also hydraulics with geometry; the science of compiling astronomical and geographical maps with astronomy; and the art of making musical instruments with the theory of music.

This list graphically reflects the differentiation of sciences and consolidation of their ties with crafts, trade, and everyday life, characteristic of the Moslem Middle Ages, which called for the development of experimental knowledge, and to a certain extent, of experimental methods of investigation, which prompted the investigator to a much greater extent than in antique science to allow not only for the qualitative but also for the quantitative aspects of the processes being studied. The link with real, everyday life was also stressed by the inclusion of astrology, alchemy, and magic in the applied sciences. Ibn Sina rejected astrology, but its general principle that earthly events were governed somehow by the motion of heavenly bodies corresponded to his own views (in the Middle Ages this principle made astrology an absolutely unacceptable discipline precisely from the standpoint of theology). His attitude to alchemy was critical but at the same time quite serious; by means of it, he wrote, it was not species-forming changes that could be achieved so much as concomitant characteristics of metals such as colour, odour, and weight. Substances could probably be converted into one another if their essential, species-forming characteristics were known, but unfortunately these were not known, so that it was impossible to reckon on the possibility of creating or eliminating them artificially. Ibn Sina categorically opposed explanations of any sort of mysterious event or phenomenon by supernatural intervention, but did not let himself reject everything that was considered magic in the Middle Ages without going into the essence of the matter.

Pure metaphysics was divided into five sections, which had corresponding objects of study: (1) concepts relating to the existent as such; (2) the first principles of the sciences; (3) proof of the existence of the necessarily existent, and its unity and attributes: (4) the primary and secondary 'spiritual substances'; (5) the means of subordinating heavenly and earthly corporeal substances to the above-mentioned 'spiritual substances'. Applied metaphysics included the science of Revelation and of retribution in the other world. Like Aristotle, Ibn Sina called metaphysics 'the divine science', theology, but in his *Oriental Philosophy* and certain other works he employed this term in his own, narrow sense to signify one of the two main parts into which metaphysics was divided, the second part bearing the title 'universal science'. As for the sources underlying the 'divine science', *The Theology of Aristotle* had a leading place among them. Thus, like Farabi, Ibn Sina singled out in the 'first philosophy' (metaphysics) a purely theoretical part that looked toward physics (the first two points in the subjects of metaphysics listed above), and a quasi-practical part that turned to ethics and politics (the other three points), the transition from the theoretical sciences to the practical ones being effected through the science of prophecy and Revelation.

Ibn Sina traced the relationship of the theoretical sciences from the standpoint of their community of initial principles, object of investigation, and problems examined by them. Intersection of the subjects of the different sciences presupposed their interaction and, in the sense, that one science was based on the others, drawing its fundamental tenets from them. This relationship was threefold: (1) one of two certain sciences could be subordinated to the other: then the lower science would draw its principles from the higher one, in the way, for example, the science of music took its fundamental propositions from arithmetic, medicine from physics, or all the sciences together from the 'first philosophy'. (2) Two sciences might have one and the same object of investigation, but one would examine it from an essential aspect and the other from an accidental one; then the first would share several principles with the second, as physics, for example, on which astronomy was based, shared with it the proposition that the motion of heavenly bodies must certainly be circular. (3) Two sciences might study objects that were species of a certain genus; then the simpler science would supply principles to the less simple one, the way as matters stand, for example, with arithmetic and geometry, which studied two kinds of quantities, the first sharing its principles with the second.

The subordination of the sciences, however, did not mean an obligatory one-sidedness of the link between them; most of the fundamental tenets of a partial science, subordinated to a certain other science, were tested only by the superior science, but its principles are often checked by the subordinate one.[7]

Ibn Sina's classification may create an impression that the partial sciences served him only as separate fields of the application of principles directly or indirectly deduced from metaphysics as the science of sciences, the more so that he himself characterised the subjects of these sciences as essential accidents of the subject-matter of the 'first philosophy'. Furthermore, the place the 'divine science' occupied in metaphysics, seemed to witness to the auxiliary role not only of all the partial sciences in regard to it but also of metaphysics itself. And philosophy then proved to be the handmaid of theology (the 'divine science').

It was quite a different matter, in fact. When we turn to the content of Ibn Sina's greatest encyclopaedic work *The Book of Salvation* we find that it is almost wholly devoted to the sciences that are preliminary to metaphysics, according to his classification, while the 'first philosophy' has an extremely insignificant place in it, and the 'divine science' a trifling one in general. The weight of the queen of sciences is several times less than that of the science then considered the true handmaid of all the remaining servants, namely logic. That, however, does not reduce the significance that Ibn Sina and other Islamic Aristotelians attached to the 'first philosophy'. The latter, while not ceasing to be the highest synthesis and generalisation of knowledge in concrete fields, performed a difficult and responsible role that had not been its in antiquity, viz., that of defending apodeictic knowledge from an ideology based on rhetoric and dialectic.

The Aristotelians of Andalusia did not create their own classification of the sciences but, like their predecessors in the east of the Moslem world, employed the same sequence when expounding the material, and in their programmes for teaching the theoretical sciences, viz., physics, mathematics, and metaphysics. The exposition of these sciences was preceded by a preliminary review of the subject-matter of logic.

NOTES TO CHAPTER 6

[1] See: Badawi, 'Abd ar-Rahman (Eds.). *Aristu. Fann ash-shir* (Cairo, 1953).

[2] Al-Farabi. *Kitab al-huruf* (Dar al-mashriq, Beirut, 1970), pp 132-133.

[3] Ibn Rushd. *The Decisive Treatise*. In: George F. Hourani. *Averroes on the Harmony of Religion and Philosophy* (Luzas & Co., London, 1961), p 44.

[4] George Hourani, *Op. cit.*, p 51.

[5] See: Al-Farabi. *Ihsa' al-'ulum* (La statistique des sciences). Edited by Osman Amine (Dar al-fikr al-'arabi, Cairo, 1949), p 43.

[6] See: Ibn Sina. *Ibaniyyat-i Danishnama-i 'Ala'i* (Tehran, 1952).

[7] See: Ibn Sina. *Kitab al-isharat wa-t-tanbinat,* Vol. I (Dar al-ma'arif, Cairo, 1957), p 530.

7
Logic

GENERAL DESCRIPTION

The order and connection of things is the same as the order and connection of ideas—such was the basic proposition of the logic of the Islamic Aristotelians. It was only posited, however, in logic itself, since the principles of the partial sciences, they said, following Aristotle, were not derived from them but rather from a higher science. This superior science was, in this case, metaphysics. The symbol of the conformity of human knowledge to objective reality, and of thought to being, was active intellect (*al-'aql al-fa''al*), about which Aristotle spoke in the third book of *De anima*, but the content of which remained undisclosed by him. According to the Islamic Aristotelians' interpretation, this active intellect was at once both a necessary objective relation of things, the system of the world, and a reflection of this link and this system in the intellect of the humanity, in which the forms and content of thought, cleansed of individual deviations from the truth, had the same objective and necessary character.

As with their teacher, one can feel the Islamic Aristotelians' conviction in the strength, power, and objective truth of knowledge, a conviction that entailed a confusion of objective and subjective logic, such, moreover, that the objective logic of things was seen everywhere. Like Aristotle, they went no further than a stating of this necessity and objectivity of thought, did not explain them, and did not deduce them from practice as the basis and criteria of knowledge. That conviction could, perhaps, be characterised as the *falasifa*'s sole manifestation of belief in something, if they had not tried to substantiate their conviction by arguments that seemed quite weighty to them.

(1) Logic, they said, while an art related to that of grammar in its normative character, unlike the latter had a universal, human significance, and did not deal with anything that was peculiar only to a certain people.[1] Disputes could arise among logicians, of course, but their disagreements were mainly due to differences in the use of words, and to the point that certain terms evoked notions of ideas in one school that were different from those that arose in another, so that if they agreed to use them in an unambiguous, unequivocal way, disputes would not arise among them.[2]

(2) The exact sciences served as models for those who developed this discipline: geometry and astronomy, the correctness of whose propositions was determined, in turn, by their admitting of sensual verification. Because, as Bahmanyar wrote, man believed only what he received from sense perception or what was confirmed by sense perception; in the first case, it was, for example, when he knew of the existence of the sun; in the second, when he knew astronomy. The arguments that were resorted to in logic were consequently similar to those of geometry and astronomy.[3] It is necessary in that connection to bear in mind that it was the subject-matter of astronomy, i.e. the motion of the heavenly bodies, that, in the eyes of the *falasifa*, most directly disclosed the necessity and regularity of natural phenomena symbolised by active intellect, and that geometry served them as a model of the progressive development of the intellect of the humanity, which adequately reflected this necessity and regularity, and as such functioned as the being-for-other of the same active intellect. The task of logic, according to Ibn Sina and his followers, consisted, properly speaking, in serving as a standard of exactness comparable with the mathematical sciences and applicable to other sciences in which mistakes were possible, as for example in physics. In short, Bahmanyar wrote, they arrived at the development of logic just as they arrived at the development of the science of music, starting from the musical art, and at the development of metrics, starting from the poetic art, i.e. as if they wanted the statements of sciences that did not permit of inaccuracies and statements of sciences

in which there were inaccuracies to have a correspondence or harmony between them; and that could only be got by abstracting proofs from the material (i.e. by separating the logical form of speech from its content—*Authors*), which facilitated harmonising of statements of sciences in which inaccuracies were permitted with statements of sciences in which they were not.[4]

The Islamic Aristotelians defined logic, following Aristotle, as an instrument of knowledge that served as an introduction to all the sciences, but, following the Stoics, they characterised it as an independent science and a part of philosophy. As Ibn Sina and his successors noted, however, there was no contradiction in that; to the extent that logic investigated the unknown it functioned as a special science; but to the extent that it was employed outside its own field it was treated as an instrument and criterion of knowledge ('organon'). Thus, when a syllogism was adduced that was a conclusive (*muntij*), i.e. correct, syllogism from which the conclusion followed, then logic served as an instrument and criterion of knowledge in that case; but if, when this syllogism was adduced, it was said, besides, that it was conclusive, not fruitless (*'aqim*), then logic was already the content (matter) of knowledge, i.e. an independent science.

Like Aristotle the Islamic Aristotelians started from human speech when investigating man's cognitive activity, finding in grammar both analogies to and differences from the forms of logical expressions. In that connection it should be noted that the non-coincidence of thought and its material vehicle (speech), which was manifested in languages of different structure, must have been perceived particularly sharply by the *falasifa*, since the syntactical forms of the Semitic languages (to which Arabic belongs) sometimes differed markedly from those of Indo-European languages. The *falasifa* also paid great attention to the difficulties that attended the translation of logical terms, and of the technical terms employed in philosophy in general, by words drawn from everyday language. In this case they strove for an exact fixing of the meaning of terms, and to separate them from the meanings attached to them in the ordinary speech of the multitude.

But the difference between grammar and logic was qualitative and not simply quantitative (degree of abstraction); while, given innate faculties, one could get by without studying grammar, no innate capacities could help anyone ignorant of logic to employ arguments.[5-6]

That is why the *falasifa* often called logic, and mathematics, genetically related to it, the propedeutic sciences. For, if innate capacities alone, were sufficient for correct thinking, no disagreements would arise among scholars and no contradictions in views would appear among them.[7]

The aim of logic was knowledge, which was either a concept or a statement. A concept was developed as 'first knowledge' by means of a definition or description, but a statement by means of a syllogism, i.e. of a demonstration, or by arguments similar to it, like a paradigm or induction. A syllogism and definition consisted of form and matter. Logic was an art that gave knowledge of what forms and matters provided a correct determination, called 'definition' (in the proper sense of the word), and a correct syllogism, called 'demonstration'; of what forms and matters gave a persuasive definition, which was called a 'description'; and of what forms and matters gave a persuasive syllogism such as was called 'dialectical' when strong and giving rise to agreement similar to reliable knowledge, but 'rhetorical' when weak and giving rise to accepted opinion; of what forms and matters yielded an unsound syllogism (known as 'misleading' and 'sophistical'), and about what forms and matters gave a syllogism that did not give rise to agreement of any kind, but only affected the imagination, prompting the soul to feel love or hatred for something, and evoking in it a feeling of loathing, joy, or sadness, and was called a 'poetic syllogism'.[8] The central branch of logic was that devoted to the apodeictic syllogism (demonstration).

By a tradition already established among Hellenistic commentators the Islamic Aristotelians included questions of rhetoric and poetics in logic, in addition to the matters examined in the *Organon*, and also problems raised by Porphyry (c. A.D. 233-c. 304) in his *Isagoge* (*Introduction*).

We shall examine some of the main ideas developed by them in their logical works below, insofar as they are connected with their general, ideological, world outlook and scientific orientation.

CONCEPTS AND JUDGMENTS

Farabi and Ibn Sina began their treatment of the problems of logic, in contrast to Ibn Rushd, with an analysis of the points raised by Porphyry in *Isagoge*. In this branch of logic, and in that devoted to treatment of the matters discussed by Aristotle in his *Categories*, the Islamic Aristotelians treated the first of the forms of knowledge differentiated by them, viz., the concept. Their ideas of concept and judgment, it should be noted, were conveyed by two pairs of terms *tasawwur* and *tasdiq* on the one hand and *ma'na* and *hukm* on the other. The first two words literally meant 'notion' and 'agreement', the second pair 'idea' (literally sense, what was meant by) and 'judgment' (from the verb *hakama*, to judge). It is clear from the context in which they were used that it was a matter in the first case of a concept and judgment developed through reflection (in particular *tasawwur*, that is a concept obtained through definition), and in the second of a concept (or rather a general notion) and judgment arising spontaneously and, moreover, not even in reason, but at a lower cognitive faculty of the soul.

It is also important to point out that an idea (*ma'na*) that formed the 'matter', i.e. the content, of a linguistic expression studied in logic, like the mental form evoked in the mind by a word, was considered a concept (*mafhum*—an intelligible), like the content of the reply to the question 'what is that?' i.e. a quiddity (*mahiyya), as something having objective being, i.e. a real essence* (*haqiqa*) or something unlike another, i.e. individual essence of haecceity (*huwiyya*).[9] 'Agreement' with respect to the relationship of the ideas joined together in a proposition, whose combination might be true or false, was called *tasdiq*, i.e. a judgment in the logical sense of the term.

A concept ('notion'), as we have already said, was obtainable, according to the Peripatetics, by means of definition and its 'likes', such as a description, while a judgment ('agreement') was obtainable by means of a syllogism and its 'likes', for example by induction and analogy. Definition and syllogism were the means by which the objects of inquiry were obtained, i.e. the objects that were unknown but became known in this way.

In the branch of logic corresponding to the content of the *Isagoge* predicables were examined, viz. genus, species, and specific difference (*differentia*), which were classed as essential 'universal vocables', as well as proper attributes (*propria*) and accidents which belonged to the type of accidental 'universal vocables'. Essential predicables served as predicates that constituted the gist, the quiddity, the essence of the subject by their content.

As for *propria* and accidents, they were so related to the subject that they ascribed something additional to its quiddity. Such accidents were, for example, 'white' and 'real'.

An accident, as a universal vocable (predicable) was not to be confused with accidents as categories. For the Islamic Aristotelians the accidental (*ardi*) correlated to the essential (*zati*) when it was a matter of universal vocables, and to the substantial (*jawhari*) when it was a matter of categories. From their standpoint the essential could be both an accident, as for example in the case of 'whiteness', and a substance, as for example in the case of 'animal'; in relation to man, the accidental could also be both accidence and substance, for example in the case of 'white', i.e. of a white substance, since it was a body with an inherent whiteness. 'White' as substance did not figure either as genus for, say, gypsum or snow, or as differentia and proper attribute; consequently it was accident. The same applied to 'existent'.

The Islamic Aristotelians admitted a difference between essence and existence, but the difference was only logical and never real. Farabi, who was the first of them to touch on this theme, had stressed, in respect of whether there was a predicate in the statement 'man exists', that some considered it did not have a predicate and others that it did; for him, however, both points of view were valid, but in different respects, because this statement, and ones like it, had no predicate from the standpoint of the naturalist who studied (concrete) objects, since the existence of a thing was nothing but the thing itself, while a predicate had to represent an idea about which a statement was made concerning its intrinsicalness or the non-intrinsicalness of the thing. From this point of view said statement had no predicate. But from the standpoint of the logician, this statement consisted of two words that formed two parts of it, and it could be true or false, it possessed a predicate in that respect. So that the two points of view were correct, but each in a certain respect.[10] In the same way Ibn Sina wrote, in his treatise *Risalat al-'arsh*, that the quiddity before its existence (the preposition 'before' must be understood here, of course, in the sense of logical and not temporal precedence) had no existence, and if it had existence before it, it would have no need of the other existence.

In the branch of logic corresponding to the ideas of Aristotle's *Categories*, the *falasifa* examined the relation of ideas and names, the relation between predicate and subject, the ten categories, 'prior', 'posterior' and 'together', 'potential' and 'actual', the four causes, and 'opposites'. Insofar as some of these points were related to the theory of being, we shall examine them in the chapter on metaphysics. As to the logical questions clarification of which is necessary for a more adequate understanding of the *falasifa*'s metaphysics, we must dwell on the theory of Ibn Sina and his successors on the relation of ideas and names.

Homonymic objects, they considered, were ones whose name was the same, but what was meant by this name was different, so that there was no similarity in it, as for example when the word *'ayn* signified both a spring and an eye.

Similarly named objects were ones whose name was one and the same, but what was meant by it differed, so that there was also a similarity in it as, for example, when both an animal in a picture and a natural animal were called 'animal'.

Objects with names expressible 'through doubt' (*bi-t-tashkik*) or, to use the Thomist terminology, by analogy, were ones whose name was the same, and what was meant by this name was also the same, but was not spoken in an equivalent way about the objects designated by it: in one case, in a primary way, in another in a secondary way, and so on. 'One', for example, primarily meant what was not divisible, secondarily what was actually not divisible but could be potentially, and in a tertiary way what was divisible both potentially and actually, but whose parts had some unity uniting them. Matters were exactly the same with 'existence', which, for instance, primarily expressed substance, secondarily accidents; this name, moreover, was pronounced with different force about them.

Objects with one name were those whose name, and what was meant by it, were the same, and had no very significant differences, as for example, when a man and a horse were called 'animal'. All universal vocables were extended equivalently and univocally to the partial expressions united by them. That, moreover, not only concerned predicables that functioned as constituent attributes, i.e. essential universal vocables, but also applied to unessential ones (*propria* and accidents).

Synonymous objects were ones whose names had one and the same meaning though the expressions designating the idea were not the same, as for example when one said 'human beings' (*al-bashar*) and 'people' (*an-nas*).

Objects with different names were ones for which both the names and what was meant by them were different.

Objects named derivatively were ones that had a certain relation to a definite thing in the sense of similarity of name or idea, which was not, however, so great that they would have one and the same name with an identical sense or meaning.

The category of expressions attributed to objects 'through doubt', by analogy, or as Ghazali characterised it in his *Maqasid al-falasifa* (*The Intentions of the Philosophers*) 'by coincidence' (*al-alfaz al-muttafiqa*), was especially important for establishing the difference between the theistic and pantheistic answers to the relation of God and the world. Explaining the origin of the terms 'expressions by coincidence' and 'expressions raising doubt' (*al-affar al-mushakikka*), Ghazali wrote that they were ones that 'wavered' (*al-mutariddida*) between homonymous statements and synonymous ones, since they were extended to the objects designated by them by intermediate means, viz., *secundum prius et posterius*.[11] So if 'existence' were to be expressed about God and the world univocally, as of objects with the same name, we would be dealing with theism in which the dualism of the Creator and the created world was affirmed as two species of being, in the same way as 'man' and 'horse' functioned as two classes of objects united by the genus 'animal'. But if 'existence' were extended to the Creator and the created world secundum prius et posterius, then the one and the other could prove to be one and the same, but looked at from a different standpoint. The world regarded as an aggregate of single things existing in space and time, for example, and therefore only possible entities, and not necessary in themselves, would be something posterior in relation to the same world when it was described as an entity self-sufficient in its existence. 'Existence' would be expressible in a 'weak' form (in the falasifa's terminology), in the first case, and in the second case in the 'strong' form, and we would be faced with a real, philosophical pantheism, if the wholeness of the world were called God. It is necessary, moreover, to remember the homonymy of word use when Islamic Aristotelians resort to designating the first principle, and the supreme basis of being by the word 'God' (Allah) or 'divinity' (*ilah*). In the mouths of *falasifa* these words had a quite different conceptual and emotional content than in the mouths of theologians or simple believers, the more so that it was difficult to speak of a homonymous use of the word 'God' in regard to God, since there was no name in general for the necessarily existent. The first principle, Ibn Sina wrote in his *Explanations*, was inaccessible to the human mind in its immanent and real essence, and there was no name for its real essence, while the necessity of existence figured either as an interpretation of the name of this real essence, or as one of its inseparable attributes (*lazim min lawazimih*).[12]

In the philosophy of Islamic Aristotelians, as in Aristotle's own, the categories had a dual logico-ontological nature, and were examined in their logic in connection with the semantic classification of predicates of being, and bore a common appellation with them, viz., *maqulat*. Like Aristotle, the *falasifa* established ten semantic predicates: substance (man, horse), quantity (long, short), quality (colour, figure), relation (father-son, half-double), 'where' (in the house), 'when' (yesterday), position (standing, sitting), possession (girded with a sword), 'action' (to burn), and 'affection' (to be burnt).

The *falasifa*'s categorial system was constructed by converting the categories into subjects of existential sentences in which existence was predicated of them secundum prius et posterius, which meant at the same time, for them (the *falasifa*), a structuring of being (the existent) itself. Farabi, in whom we first find such an approach to the categories, replied, in response to a question about how accident predicated the nine highest genera secundum prius et posterius, that quantity and quality were accidents by their nature, needed only a substance that functioned as their 'bearer' (*hamil*); as for a category like 'relation', since its being was determined by the link between substance and substance, between substance and accident, or between accident and accident, it needed more than one substance only by its nature; and everything that needed one thing for stability (*thabat*) of its essence (*zatih*) was prior (*aqdam*) in its being and more worthy of the name 'being' than what needed more than one thing.[13]

In connection with the treatment of 'to act' and 'to suffer' as one 'composite' category, Farabi remarked that there were four purely simple categories among the ten. These were substance, quantity, quality, and position. As for 'to act' and 'to suffer' [action and passion in Aristotle], they belonged to what happened between substance and quality, 'when' and 'where' to what happened between substance and quantity, possession to what happened between one substance and another that embraced all or part of the first substance, while relation belonged to what happened between any two of the ten categories and any of the two species of one or other of the ten categories.[14] Existence was predicated, clearly, of the 'simple' categories as prior and the 'composite' as posterior.

In addition to this horizontal structuring of the categories the Islamic Aristotelians, like Aristotle himself, classified them vertically, singling out individuals and universals of substance and accident (in Farabi's reference above it was probably just this division that was meant to the 'highest genera of being' when it was said that the category of relation 'happened' also between 'any two species of one or other of the ten categories').

A general orientation of the doctrine of Islamic Aristotelians to the 'highest genera of being' is thus traceable. The category of substance embraced the field of the substantially existent in relation to which all the other categories formed the sphere of the accidentally existent, predicating of substance at the logical level as of their subject; at the ontological level, the subject was the substratum (*mawdu'*), or bearer (*hamil*) of the accidents, which consequently depended in their being on the being of the substance. As with Aristotle, the heteropredicativeness of accidents served as an index of their incapacity for self-sufficient existence, which rendered Plato's doctrine of ideas of quality, quantity, etc., invalid as self-existent principles.

The category of substance was also predicative, but was autopredicative. Substance, Farabi said, was in general that which did not yield knowledge about some bearer outside its essence. That which had such a property existed in two varieties: one yielded knowledge simultaneously about the essence of all its bearers—that was the universal of substance; the other yielded no knowledge either of the essence of some bearer or about anything outside its essence—that was the individual of substance.[15] So the universal of substance, and consequently, every universal, in its being, was not self-sufficient but required the existence of a single, 'primary' substance. That idea was stressed in every possible way by the *falasifa*. Farabi wrote about it along the following lines: individuals of substance were those called 'primary substances', and universals were 'secondary substances', since the individuals of substance were substances to a greater extent, because they were more perfect being than universals of substance, in this respect, that they were more self-sufficing and more independent of anything else in their being, because individuals of substance did not need any subject whatever in their being, since they were not in the subject [as in a substratum and did not predicated it [as the subject—*Authors*]. As for universals of substance, they stood in need, as such, of individuals of substance for their existence, since they predicated about subjects, and their subjects were individuals of substance.[16]

The prior existence of a 'primary substance' for universals was not to be understood, of course, in an absolute sense. Epistemologically this point could be made in an opposite way, because universals were not known at every step in experience through individual things, but rather individual things through universals. Ontologically, however, individual material things were primary, and their reflection in the human mind secondary. Again, according to Farabi, an object became intelligible through its quiddity becoming known. Individuals of substance became intelligible through their universals becoming known by the intellect. Concepts of individuals of substance existed only because the individuals themselves existed. Thus, for individuals of substance to be intelligible they needed universals of substance and universals of substance, in order to exist, needed individuals of substance, since the universals in the mind would be fictitious if universals of substance did not exist, and what was false did not exist.[17]

From that it followed that the secondariness of universals meant, for Islamic Aristotelians, the possibility, as well, of their corresponding or not corresponding to reality. The proposition that the false was non-existent meant for them that a false idea arising in the mind did not have a correlate among single substances, i.e. in the material world (the principle of correspondence). That proposition was a partial deduction from *falasifa*'s more general principle that truth (*sidq*) was an adequate reflection of the object by the cognising subject, or in its mental existence (*fi-z-zihn*) it was such as in its extra-mental existence (*kharij az-zihn*), while the truth or falsity of an idea could only be discovered in a judgment that was a statement examinable together with its 'matter' (sense) as true or false.

The *falasifa* analysed a judgment in the branch of logic that corresponded in content to Aristotle's treatise *De interpretatione*, in which the relations between objects, concepts ('notions'), statements, and written designations were examined, the difference established between declarative and non-declarative expressions (requests, questions, wishes, etc.) whose truth or falsity it was impossible to appraise, and a classification of judgments provided. The last were divided by quality (affirmative and negative), quantity (universal, partial, and indefinite, which Ibn Sina equated with particular ones), relation (categorical, conjunctive-conditional, and disjunctive-conditional), and modality (necessary, possible, and impossible). The division of judgments (statements) of Ibn Sina and his successors by modality was of paramount importance for clarifying the essence of their arguments about the possibly existent and the necessarily existent.

Ibn Sina drew a sharp line between logical modality (*jiha*) as a mode of understanding propositions about an object or phenomenon and ontological modality as the mode of existence of an object or the course of a phenomenon (which he called the 'matter' (*madda*) of the proposition).

When discussing propositions about the possible, Ibn Sina pointed out its different meanings. 'To be possible' in the broad sense was the same as 'not to be impossible'; then 'not to be possible' would mean the same as 'to be impossible'. In another, narrow sense, 'possible' was what could be and could not be, i.e. what was necessary and included an existent whose being did not possess infinite duration, even when it had a certain necessity in relation to a definite time, as for example, during an eclipse of the moon.

Ibn Sina treated necessity as a state of the predicate in relation to the subject, which had always to be preserved, either unconditionally, or on a certain condition.

He listed the types of necessity and possibility according to the diminishing intensity of the connection between the predicate and subject in sentences of one modality or another. The strongest link between them was in propositions of necessity ('God exists'), and the weakest in statements about the possible,. where the possible was what could or could be not in the future.

SYLLOGISTICS

In order to understand the philosophy of the Islamic Aristotelians the classification of 'first premisses' in their doctrines about the syllogism is most important. Farabi counted four such: (1) accepted positions; (2) generally known main points; ,(3) the data of sense perceptions; (4) reliable points.[18]

The classification developed by Ibn Sina was more detailed. According to it similar premisses were divided into the following groups:

(1) Initial data: premisses of an axiomatic character, perceivable by pure reason without any external influence ('the whole is greater than its parts'); initial statements (like initial, irreducible concepts) were contained in the natural mind (*fi-l-gharìza*); one was often not conscious of their existence until some expression or sign drew one's attention to them (these premisses correspond to the fourth group in Farabi's classification);

(2) Sense data (with an extended interpretation of 'sensation'): these included not only data obtainable by the external senses ('the sun warms' or 'fire is hot'), but also data of introspection concerning the subject's emotional state and self-perception (these data corresponded to Farabi's third group);

(3) Data of experience—premisses obtainable in the course of repeated observations involving a certain latent capacity for deduction (the syllogism employed in an experiment with observation of some effect that generally or always occurred was roughly as follows: this effect is constant; no constant effect is by chance; consequently this effect is not a chance one); the simplest example of a premiss acquirable through experience was that the blow of a stick caused pain (data of intuition were closely related to the data of experience, a capacity for deduction also being involved in obtaining them; such was the judgment made from observation and comparison of the light coming from the Sun and Moon, that the Moon acquired light from the Sun);

(4) Data obtained from other people: premisses obtained from the testimony of many people that did not inspire doubt in view of the concurrence of the information so obtained (its reliability depending, moreover, not on the number of testimonies but on their unerringly determinable adequacy); the syllogism on which was based confidence in him who communicated, for example, the existence of Mecca, included two premisses: so-and-so said this without ulterior motives, and impartially spoke the truth;

(5) Premisses with which the conclusions were in practice already given: those with whose appearance in the mind the middle term was then and there revealed without

special quests being required; an example was the statement that two was half of four;

(6) Generally accepted propositions: these were statements that enjoyed general recognition (they also included axioms not just as axioms, however, but as generally accepted propositions); moral and religious judgments constituted the bulk of this kind of proposition, being regarded by the multitude and 'its likes', i.e. theologians, as statements allegedly possessing rational necessity and direct, immediate credibility (most people's agreement with them came from the habit of hearing them everywhere from childhood); premisses of this sort corresponded to the second group of 'initial propositions' in Farabi's classification;

(7) Data of the estimative faculty (*wahm*): these were propositions based on testimonies of the psychic faculty akin to imagination (which we shall discuss in detail in the section devoted to the *falasifa*'s doctrine of the soul); examples of these premisses were the following: 'anything that cannot be shown to exist outside the world or within it, does not exist'; 'It is necessary for either a void or a plenum to exist outside the world' (the obsessive force of such plausible but actually false statements made them similar to axiomatic ones);

(8) Accepted premisses: views borrowed either from many learned men or from someone who enjoyed the reputation of a sage; they corresponded to Farabi's first group of premisses;

(9) Assumptions: premisses accepted irrespective of their truth or falsity, insofar as they were accepted by the opponents (in contrast to opinions, such premisses were accepted by individuals but not by groups of people);

(10) Presumptions: premisses accepted in the presence of doubts, when reason recognised their possible untruthfulness (such, for example, was the statement: 'So-and-so is corresponding with our enemy, which means that he is contemplating something hostile to us');

(11) Opinions formed at first glance: propositions initially acceptable but either refutable on closer examination or defendable as opinions of one's own, i.e. as an inclination to accept some point of view while conscious that the matter might turn out the opposite; an example was the

statement: 'Help the brother, whether he commits an injustice or suffers one';
(12) Premisses resembling other propositions: statements that revealed a certain resemblance to axioms without, however, being such in fact;
(13) Data of imagination: statements so formulated that they evoked surprise in the soul which forced a person to become emotionally excited, irrespective of whether or not his excitement was accompanied with the development of a certain judgment; such, for example, was the effect produced in the soul by the statement 'honey is nauseating bile', which was based on the similarity of honey and bile when the soul began to experience a loathing for honey (most people's actions were governed by just such emotional states, and not by arguments, opinions, or axiomatic propositions).

From the standpoint of the connection of this branch of the Islamic Aristotelians' logical doctrine with the science of their day, and the relation of philosophy, speculative theology, and religion, their allocation of the listed premisses according to the five classes of syllogism acquired paramount importance. These classes were: apodeictic syllogisms, which were the means of science; dialectical and sophistic ones, on which, from the *falasifa*'s standpoint, speculative theology was based; rhetorical and poetic syllogisms, which formed the foundation of traditional religion.

Axioms, data of sensations and experience, propositions obtained from others, and premisses with which the conclusions following from them were given, served as premisses for apodeictic syllogisms. This list obviously demonstrates logic's link with scientific investigations based on experiment and observation. This doctrine of the premisses of proof was oriented to generalising the diverse manifestations of a natural pattern or law, and their regularity and necessity, a generalising that could not rely, of course, just on premisses that had a necessary and essential character in the logical understanding of these terms.

It is important in that connection to stress the philosophers' interest in non-necessary premisses. They were far from refusing these premisses a scientific, cognitive value. Ibn Rushd pointed out that most syllogisms consisted of statements about 'what occurs more frequently', while even expressions about the possible and 'what occurs less frequently' held the attention of Ibn Sina, since a different degree of reliability and probability was required of conclusions in different cases.

Dialectical syllogisms (together with sophistic arguments), which Islamic Aristotelians considered the principle means of speculative theology, were constructed from generally accepted propositions and assumptions (sophistic arguments from data of the estimative faculty and likening premisses). A dialectical judgment was a kind of opinion that lacked certitude, since agreement with it was accompanied with a consciousness that a statement opposed to it might prove to be true.

Islamic Aristotelians did not deny the cognitive value of dialectics. When dialectical syllogisms were introduced into some question, one of them proving existence and the other nonexistence, then (according to Ibn Sina, for example), if they were well thought out, the truth could be discovered by them.[19] But syllogisms constructed from dialectical premisses as such were necessarily included into a plausible opinion (*zann ghalib*), because, if said premisses were quite true, it was only by accident.

To the extent that dialectic was associated with speculative theology in the broad sense (including here the theology of all three monotheistic religions united by the word *'kalam'*), the accents on the methods of argument adopted in it were altered in accordance with the directions established by spokesmen of Islamic Aristotelianism about the relation of philosophy and religion, since by the 'generally accepted' premisses of dialectical arguments (and these premisses were considered most typical of them) were meant primarily religious dogmas. The attitude to *mutakallims* and their art (the science of kalam) was displayed in those doctrines of the *falasifa* in which it was a matter of the 'virtuous city', i.e. primarily those of Farabi and Ibn Rushd.

In Farabi's ideal state dialectics occupied a definite place in ideological life, but the role assigned to it there was not independent but purely apologetic (in which can be seen the influence on him of his Christian surroundings, and his acquaintance with Christian apologetic literature). His 'virtuous city' knew only two types of ideology: philosophy as reliable knowledge and religion as an 'imitation' of philosophy. In his treatise *On the Attainment of Happiness*, he wrote:

> As for the one who assumes a political office with the intention of accomplishing the purpose of the supreme ruler/i.e. ruler-philosopher—*Authors*/, he adheres to thoroughly scrutinised opinions. However, the opinions that caused him to become an adherent or because of which he was convinced that he should use unexamined opinions; he conforms to unexamined common opinion in his theoretical cognitions as well. The result is that the supreme ruler and he who possesses the science that encompasses the intelligibles with certain demonstrations belong to the elect. The rest are the vulgar and the multitude.[20]

Thus dialecticians (*mutakallims*) were equated with the 'multitude' and constituted its 'elect' substratum only in a relative sense. As soon as dialecticians, i.e. apologists of the 'true' religion developed by the philosophers in a form understandable for all, 'theorised' in a certain way, Farabi wrote, then people thought they belonged to the elect and not to the multitude, but it should be known that, being numbered in elect, they functioned as such only in relation to the followers of this religion, while the elect position of the philosophers was in regard of all people and nations.[21]

The fact that dialectical arguments were found—in any society, whether perfect or imperfect—to be in the service of a religion that employed the most cognitively valuable expressions of a rhetorical and poetic content, did not alter the truth that the dialectic like the sophistic came historically before apodeictics, preparing the advent of philosophy based on reliable premisses.

Farabi wrote that the art of *kalam* and *fiqh* were clearly something posterior in relation to religion, and religion something posterior in relation to philosophy; and that a capacity for dialectical and sophistical arguments preceded philosophy as dialectical and sophistical philosophy as a whole preceded religion just as the maker of a tool preceded the tool in time, while dialectics and sophistics preceded philosophy in the same way as the feeding of a tree preceded the fruit or as the flower on a tree preceded the fruit. Religion, too, preceded *kalam* and *fiqh* in the same way that a master who employed servant preceded the servant, and he who used a tool preceded the tool.[22] Hence Farabi's tenet that theology served as a handmaid of philosophy in the 'virtuous city', since it served as apologetics for the form of religion developed by the philosopher-ruler for the multitude. The function of dialecticians coincided here with the function of the guardians in Plato's *Republic*, namely as an estate that stood on guard for the official ideology.

Speculative theology was also related dialectics and sophistics for Ibn Rushd. In a short commentary on Aristotle's *Topics*, he said that the premisses from which dialectical arguments proceeded were based on 'commonly accepted' and 'commonly held' opinions, that they generated a conviction approximating to reliable knowledge, and therefore displayed a greater resemblance to the art of proof than rhetoric and poetry. Dialectics was not directly linked with the activity of *mutakallims* in this commentary, but in his middle commentary on the *Rhetoric* Ibn Rushd cited an abundance of examples demonstrating *mutakallims*' incapacity to employ even rhetorical statements properly. His idea that theological arguments were closer to rhetorical ones in real life than to dialectial ones, coincided with Farabi's proposition that the 'art of *kalam*', which corresponded to a given religion in an imperfect society, was not aware (*la tush 'iru*) of anything except convincing things and arguments, and included only convincing methods and arguments in their corrections[23], especially when analogies of things stood for the things themselves. In other words really dialectical arguments, capable of leading the hearer or reader to reliable truth, could only be employed, from Farabi's point of view, in the perfect society in which the 'ideal religion' relied on symbols, which, decoded by means of dialectics, could bring a person to the threshold of philosophical, reliable knowledge. We do not find in Ibn Rushd pointers to this kind of a creative role of dialectics in society, which is not surprising, since he imagined the perfect society not to have any need of theologians, because there was no place in it for any 'ideal religion'.

Finally, as regards religion, its arguments were based on rhetorical and poetic expressions.

The premisses of rhetorical arguments included opinions, acceptable premisses and propositions formed 'at first glance', and these were employed in both religion and politics, in civil affairs. The aim of rhetorical arguments was to convince someone of something irrespective of whether what it was wanted to convince that someone about was true or not. Islamic Aristotelians pointed out a number of features that brought rhetorical arguments close to dialectical ones. (1) They did not make their aim the attainment of reliable knowledge. (2) They could lead to conclusions opposed to one another. (3) A person resorting to them appealed to someone else and not to himself as happened in proof. (4) Rhetoric, like dialectics, did not have its own specific subject-matter, and arguments based on it could be addressed to a practically unlimited audience, and especially to the multitude.

The use of factors external to the corresponding arguments, together with ploys and means applicable in the persuasion itself, was specific to rhetoric. Farabi included the use of enthymemes and examples in them; reference to the orator's virtue and to the depravity of his opponent; urging of listeners to his side by inciting anger, enthusiasm, and other emotions in them; demagogic appeals to listeners or readers; hyperbolising of something, embroidering, and elevation, or on the contrary, underestimation or belittling of it; citing of customs interpreted in favour of his statements; reference to witnesses and to the opinion of other people; the linking of statements with the good or evil attendant on their content; the use of wagers; the use of oaths; and the use of facial expressions, gesticulations, and an appropriate intonation.

Ibn Rushd cited the same techniques, sometimes employed in sophistic arguments, too, directly linking some of them with methods of persuading people of the truth of religion and prophecy. In particular, he included among rhetorical ploys justifying of the reliability of revelation and *hadiths* by the testimony of transmitters (*isnad*), and citing of miracles ascribed to the Prophet as indisputable evidence of his prophetic mission.

The *falasifa* treated rhetoric as an art closely associated with poetry, following a tradition that went back to Plato, who regarded poetry as rhetorical speech appealing to the multitude and embroidered by melodiousness, rhythm, and measure. Islamic Aristotelians saw the main difference between them in rhetorical speech's being above all persuasive, while poetic was mimetic and imitative. Neither had as its aim the attainment of reliable knowledge, but served to educate the masses. In accordance with the Moslem idea that there were two paths to God—the word and *jihad*—these arts were related to the first while the method of force in relation to the enemies of society (the state) was related to the second, when the method of persuasion (the word) did not have the necessary effect on them.

The object that poetic expressions were meant to affect was the imagination, rather than the intellect, Moslem Aristotelians said. These expressions gave rise to imaginary images in soul in order to arouse dislike or an inclination for something in it. Such effects became even deeper when they were melodious and measured, i. e. had the characteristic properties inherent in the Koran. The philosophers ascribed great practical significance to the mytho-poetic expressions of religion as the sole means capable of inducing the multitude to refrain from some actions and to perform others. That is why, Ibn Rushd wrote, many of those who did not believe religious stories (*qasas shar'i*), became scoundrels *(arazil)*. For people were impelled by their nature to a certain one of the two varieties of speech, either apodeictic or non-apodeictic arguments; but the vile type of people were insensitive to these or other arguments.[24].

A feature of Islamic Aristotelians' syllogistics was their clear awareness that a syllogism was a reflection of the relation of consequence, cause, and bearer of the cause: if a definite fact was the bearer of a certain cause, a consequence produced by this cause arose *post factum*; therefore, if an effective cause of some determinacy was indicated in one premiss, and the presence of this cause in some object or other in another, a conclusion about the presence of said determinacy in the object would necessarily be true. That argument was directly related to the first figure of the syllogism, which Aristotle called 'perfect'. The order of the terms in the second and third figures differed from their order in the first figure, but what was said above held for them as well, since their necessity was based on the same relations of genus, species, and individual, on the one hand, and consequence, cause, and bearer of cause on the other. This necessity was brought out by means of syllogisms of the first figure either directly, through conversion of one of the premisses of the second or third figure, or indirectly by establishing, through the first figure, the impossibility of negating the conclusion of the syllogism of the second or third figure.

Islamic Aristotelians' awareness of this fact was clearly displayed in their evaluation of four figures of the syllogism. The division of simple predicative syllogisms into definite types, they said, followed from the fact that the middle term figured either as the predicate in relation to the minor term and subject to the major, or, on the contrary, as predicate in relation to both of them, or as subject in relation to them both. The first part of the division was called the 'first figure'; the second part was discarded, because its syllogistic character was far from natural; the third part was called the 'second figure', and the fourth part the 'third figure'.[25] The 'discarded' part of the division thus proved to be what is called in the history of logic the fourth or, following Ibn Rushd, the Galen figure. The point concerns syllogisms that Islamic Aristotelians characterised as 'far from nature', 'not natural', or 'unnatural', having in mind the artificiality of the fourth figure, which stemmed from the point that the position of the minor and major terms in the conclusion reversed their position in the premisses. This artificiality was a consequence of the order of the terms being the reverse in this case of their order in the premisses of first figure syllogisms (their order in the premisses of second and third figure syllogisms corresponded more 'closely' to it, in view of which Ibn Sina called them 'more natural' or 'closer to nature').

As to the order of the terms in the premisses of first figure syllogisms, it was considered natural since, if the connection of the terms in it was regarded as a reflection of the connection of consequence, cause, and bearer of the cause, it would correspond both to the axiomatic proposition according to which what was said of the genus was also predicated of any species or individual belonging to them, and the connection of consequence, cause, and bearer of the cause. In other words, the first figure corresponded more than the others to the principle formulated by Ibn Rushd that a syllogism should have a structure coinciding with the existent, i. e. the predicates in it, thought by the mind, must be such as they were in nature outside the mind.[26]

Another characteristic feature of Islamic Aristotelians' syllogistics, it must be considered, was their special interest in hypothetical syllogisms, which Aristotle only slightly touched on in the *Prior Analytics*, and which were developed by his pupils and the Stoics. Ibn Sina suggested that a book on conditional syllogisms had, all the same, been written by Aristotle, but had later been lost, while Farabi had quite a reliable idea of the history of their development. In his commentaries on the treatise *De interpretatione* Farabi wrote that the forming of the conditional syllogism had not been worked out in it at all, and had been only slightly considered in the *Analytics*. The Stoics (Chrysippus and others) had been engaged in a detailed investigation of it, and so had Theophrastus and Eudemus.[27]

Islamic Aristotelians' attention to hypothetical syllogisms can be explained, apart from that, by the fact that the proof in them was based (in contrast to categorical syllogisms) on individuals and not on genera and species, i. e. on empirically observed processes and phenomena occurring in time, which fully corresponded to their interest as naturalists in the empirical.

Their theory of the conditional syllogism was undoubtedly taken primarily from the Stoics, which is witnessed by the coincidence of their examples cited to illustrate different types of conditional syllogisms and statements, and the clearly traceable influence of the Stoics on the logic and other branches of the Islamic Aristotelians' philosophy as a whole. Traces of Stoic influence on the *falasifa's* logic are traceable in the following, apart from the point of conditional syllogisms and statements:

(1) In the matter of the status of logic in the system of the philosophical sciences: the Stoics, who first introduced the term 'logic', classed it among the philosophical sciences along with physics and ethics, subdividing it into dialectics and rhetoric; the *falasifa* suggested that it could be regarded both as a part of philosophy and as an instrument or tool of philosophical knowledge—depending on what was understood by philosophy; they were acquainted with the interpretation of logic accepted by the Stoics mainly through pseudo-Plutarch's *Placita philosophorum*;

(2) In the appearance of the terms 'representation' (*tasawwur*) and 'assent' (*tasdiq*). *Main Questions,* ascribed to Farabi, Ibn Sina's *Book of Salvation,* Ghazali's *The Intentions of the Philosophers,* and many other works of mediaeval Moslem thinkers are united by their sections devoted to logic beginning with a definition of these concepts and by an indication that any knowledge was either *tasawwur* or *tasdiq* (these terms were also employed by Ibn Rushd, from whom they passed into Latin, in particular to Albertus Magnus, who translated them as *formatio* and *fides*); the corresponding concepts in Stoic philosophy were *phantasia* and *synkatathesis,* but the influence here was purely terminological rather than conceptual (it can also be supposed that the appearance of the term and concept *ma'na* among Islamic Aristotelians, very close in sense to the Stoics' concept *lekton,* is linked with Stoic logic);

(3) In the theory of 'signs': it is quite possible that the 'inference from sign' of Ibn Sina and his followers, which they classed as inference or deduction only resembling in form a 'true syllogism' (proof), came from the signs in Stoic logic of the type of 'If a woman has milk, she is pregnant';

(4) In the question of definition and description: in opposition to Aristotle, who recognised only definition through the proximate genus and differentia, the *falasifa* relied, in addition to the Aristotelian definition, on an incomplete definition that included only differentia and remote genus, and full and incomplete descriptions (from which the full contained a proper attribute and a remote genus and incomplete proper attribute alone). Description (*rasm*) and definition (*hadd*) were united by one concept, viz., *ta'rif* (from the verb *arrafa,* to give knowledge of something), i. e. by the concept of definition in the broad sense by which was understood definition of an unknown and less known object by a known and better known object (the *falasifa's* descriptive definition, in opposition to Aristotle's definitive one was undoubtedly taken from the logic of the Stoics, possibly via Galen);

(5) In the problem of the unity of subjective and objective logic with which we began this chapter: from the unaltered entities by which Aristotle, joining the Socratic-

Platonic tradition, explained reality, the Stoics retained the idea of invariable order in the phenomena of nature, vis the reason or Logos that dominated the Universe; for the formula 'there is only knowledge of the universal' the Stoics substituted 'there is only knowledge of the necessary'; necessity, the universal order of things, symbolised by the cosmic intellect as the first creation in Ibn Sina, and the first principle (creator) in Ibn Rushd, is the core of all Islamic Aristotelian metaphysics. It is not for nothing that in the treatise in which the conception of the possible existent and the necessary existent was first expounded, which crowns the 'first philosophy' of the Aristotelians of the Moslem East, Farabi named Zeno of Citium 'the pupil of Aristotle', and the founder of Stoicism, as its author.[28]

NOTES TO CHAPTER 7

[1] See: Al-Farabi. *Ihsa' al-'ulum.* Edited by Osman Amine. 2nd ed. (Cairo, 1949).

[2] See: Bahmanyar. *At-Tahsil,* Vol. 1 (Ilm, Baku, 1983), pp 21-22.

[3] *Ibid.*, p 22.

[4] *Ibid.*

[5] Al-Farabi. *Op. cit.*, p 60.

[6] Baymanyar. *Op. cit.*, p 20.

[7] *Ibid.*, p 19.

[8] *Ibid.*

[9] See: Al-Jurjani. *Ta'rifat* (Shirkat Sahafiyya-i Uthmaniyya, Istanbul, n. d.), p 149.

[10] Al-Farabi. *Risala fi masa'il mutafarriqa* (Matba'at majlis da'irat al-ma'arif, Hyderabad, 1344 A. H.), p 9.

[11] See: Al-Ghazali. *Maqasid al-falasifa* (Dar al-ma'arif, Cairo, 1960), pp 42-43.

[12] Ibn Sina. *At-Ta'likat* (Al-Hay'a al-misriyya al-'amma li-l-kitab, Cairo, 1973), p 185.

[13] See: Al-Farabi. *Risala fi masa'il mutafarriqa,* p 7.

[14] *Ibid.*, p 15.

[15] See: Al-Farabi. *Kitab al-maqulat.* In: *Al-mantiq 'ind al-Farabi* (Dar al-mashriq, Beirut, 1985-6), Vol. I. p 89.

[16] *Ibid.*, p 91.

[17] *Ibid.*, pp 91-92.

[18] See: Al-Farabi. *Kitab al-jadal.* In: *Al-mantiq 'ind al-Farabi,* Vol. 3, p. 19.

[19] See: Ibn Sina. *Risala mantiq-i Danishnama-i 'Ala'i* (Teheran, 1952), pp 130-131.

[20] Al-Farabi. The Attainment of Happiness. In: *Medieval Political Philosophy: a Sourcebook* (The Free Press of Glencoe, New York, 1963), p 75.

[21] Al-Farabi. *Kitab al-huruf,* p 133.

[22] *Ibid.*, p 132.

[23] *Ibid.*

[24] Ibn Rushd. *Talkhis Kitab as-shi'r*. In: 'Abd-ar-Rahman Badawi. *Aristu: Fann as-shi'r*, p 224.

[25] Bahmanyar. *Op. cit.*, Vol. I, p 122.

[26] Ibn Rushd. *Talkhis mantiq Aristu* (Al-Maktaba ash-sharqiyya, Beirut, 1982), Vol. I., p 357.

[27] Al-Farabi. *Sharh Kitab al-'ibara* (Al-Matba'a al-kathuliqiyya, Beirut, 1971), p 53.

[28] Idem. *Sharh risalat Zinun al-kabir al-yunani* (Matba'at majlis da'irat al-ma'arif, Hyderabad, 1349 A. H.), p 1.

8

Physics

ON MATTER AND ITS FORMS AND MOTION

Physics, or the science of nature (*tabi'iyyat*), according to Islamic Aristotelians, studied objects perceptible by the senses that were in change, i. e. their states whose representations were inseparable from matter. It thus differed from the other non-metaphysical science, mathematics, as the science of states of things that were inseparable from the matter in being, but that could be fancied separated from it in imagination.

The main subject-matter of physics was the natural body, insofar as it moved or was at rest. Movement was not inherent in a body as such, for to be a body meant only that a certain matter had three dimensions of definite size. But bodies possessed substantial forms, accidents, and natures in addition to corporeal form. Natures could enter a form as an element of it, and could also be identical with it (which happened in the four simple bodies or elements).

Forces inherent in bodies by their nature were divided into three types:

One type, Ibn Sina wrote, included forces acting in bodies that maintained such of their perfections as figures, natural positions, and actions; if natural positions, figures, and states were lost, these forces returned them to their bodies and reinforced them, preventing a state not corresponding to them, without knowledge, reflection, and chosen end, but through compulsion. These forces were called 'nature'. They figured as the essential principles of essential motion, essential rest, and other perfections peculiar to bodies in themselves. No natural body lacked this force.

The second type included forces that implemented a state of rest, and maintenance of species and of the rest of their entelechies by means of organs and various modes. Some of them always did this without choice and knowledge—such was the vegetative soul; others had a capacity to complete and stop action, and to comprehend the suitable and the unsuitable—such was the animal soul.

The third type included forces that performed similar actions not by means of organs and various modes but by means of will guided by a single law, which it did not break—such were called souls of the heavenly spheres[1].

The forces acting both in cosmos and in the sublunary world were not perceived directly by the senses. They were intelligible because we judged their existence only by their action, i. e. through the change caused by them—motion in the broad sense of the word. Movement happened only in relation to accidents; in relation to substance it could be a matter exclusively of generation and corruption, i.e. coming into being and passing away. The generation of a natural body involved three principles: form, matter, and not-being, that is the not-being that Aristotle called privation. Here privation figured as an accidental principle, since what arose did so to the extent that this privation was eliminated rather than to the extent that it existed. Strictly speaking not-being as privation was neither something existent nor something not existent; it was the absence of an entity that existed potentially, because the principle for an object's coming into being was not any not-being but the not-being of a definite entity in a potential state. The principle for the origination of a sword would not be, say, the not-being in a hank of wool, but was that which was in a bar of iron. The matter in which there was this privation was called primary matter (*hayula*); if the same matter were treated as provided with a definite form it was called substratum. One could therefore say that it was primary matter for a non-existent form that was in a potential state, and substratum for an existing form that was in an actual state.

Matter and form were internal causes of the origin of things. The external ones included the efficient and the final causes, the latter being interpreted as that by which 'nature does not make anything for no purpose. The final cause was revealed, for example, in the fact that an ear of barley, and not, say, an ear of wheat, grew from a barleycorn. But an action that did not take account of the mediating causes and conditions 'in the form of the end result and outcome' might lead, for example, to a person's having six fingers on a hand and not five. Such phenomena were met, but they were rare and were the exception to the general rule that all natural bodies are led in their existence towards an end and a good, nothing in them being superfluous ... They follow an imperative order, and they have no part that is unused or useless.[2]

This rule served Islamic Aristotelians as an orienter for seeking laws and regularities in natural processes that made it possible to foresee in what the observed phenomenon should end. The knowledge of this final 'end' was itself realised by investigating the formal, material, and effective causes, whose cumulative effect shaped the final cause. A specific feature of the final cause, according to Ghazali, relaying the point of view of the *falasifa*, was that the other causes became causal through it. Because, until the shape of a chair meant for sitting on and the necessity of sitting, were imagined in the joiner's mind, he did not become the maker, wood did not become the matter of the chair and did not become the receptacle of the form. The final cause, insofar as it existed in the totality of causes, was the cause of causes.[3]

Movement, as the Islamic Aristotelians interpreted it, was a gradual change in the stable state in a body such as was directed toward a certain something on the way to achieving a given end (the latter functioning as final cause). Achievement of this something through movement was potential and not actual. That state must be liable to increase and decrease, since that from which it was gradually coming, being directed to a certain something, remained until the coming from it was fully completed—otherwise the coming from it would be instantaneous. 'It has been said that "movement is the actualisation and first entelechy (completeness) of a thing that is potentially as such" '.[4]

> Thus, when a body is actually in one place and potentially in another, so long as it is at rest in its place it is potentially moveable and able to reach the other place; and if it moves it attains its first entelechy and actualisation which is the motion itself, and through it attains its second entelechy and actualisation which is the reaching to the other place. This is how movement becomes the first entelechy of what is potential. That being the case, the existence of movement is placed in time between pure potentiality and pure ac-

> tuality, and is not one of those things that actually takes place completely and permanently. All movement is in things that are liable to growth and shrinking, and does not involve substance, which does not suffer such changes. There is, therefore, no movement in substance; and its generation and corruption is not change, because it takes place at once and not gradually.[5]

The Islamic Aristotelians examined in detail the forms of motion inherent in each of the nine categories of accident:

— movement in relation to quantity was growth and shrinking, concentration and deconcentration;

— movement in relation to quality was expressed in a weakening or strengthening of something, for example in darkening or lightening;

— for the category of relation in itself there was no special form of motion because movement did not happen in correlativeness but in the correlated objects themselves;

— motion in respect of 'where' was the most obvious; it was spatial movement or shifting (which is what the 'multitude' had in mind when speaking of 'movement');

— as regards 'when', insofar as its existence itself was determined by movement, the latter could not occur in it (otherwise, in one 'when' there would be another 'when', which was absurd);

— movement in respect of position was a change of position but not of place; it was therefore not identical to a shift either in the broad sense (movement in relation to 'where') or in the narrow sense (change of place); following Aristotle the *falasifa* considered place 'the limit of the containing body that touches the limit of the contained body;'[6], outside the Universe there was no void (*khala'*) nor plenum (*mala'*); consequently it could not have any place, which meant that the Universe did not change place—it rotated, changing the position of its parts in relation to a centre;

— movement in regard to a possession had an accidental character since the primary form of change of state occurred in it in relation to 'where';

— movement also only occurred accidentally in action (and suffering), and not essentially, because a thing was capable of being gradually predisposed to expenditure of its attribute of action not from the standpoint of a lessening of the substratum's capacity to complete an action during one and the same state, but from the angle of its state. That happened either because the force (if its action was performed by nature) began gradually to decline, or because the determination (if its action was performed by will) began gradually to weaken, or because the organ and instrument (if its action was performed by the one or the other) began to lose its efficiency. In all these cases the change of state primarily happened in the force, resolution, or organ, and later in action.[7]

Movement thus essentially occurred in respect of quantity, quality, 'where', and position.

Rest was the privation or not-being of a given form in what was proper to it. Like the not-being that anticipated the origin of substance, this privation had a definite existence.

Together with the argument about not-being as privation anticipating origin, this treatment of rest gave the most general characteristic of existence as the predicate in judgments (statements) in which the subject could represent both something actual and something potential. To exist meant to be a single object concretely, objectively given to us, or to be a concept in the mind (or form in the imagination). In the last case the question arose of the truth of the concept (or imagined form), which was resolved by the thesis mentioned above about existence being an accident, additional to essence; a concept was not true if existence did not supplement the essence of a thing that could be and not be, and that existed only in our mind; on the contrary, it was true if existence supplemented its essence. When existence did not supplement its essence, a statement became an empty tautology. When existence supplemented essence, a statement became informative, affirming that the concept in the mind was represented in objective reality in some concretised something, be it an actual object or the absence of an object concretised by some concrete state which was precisely its potentiality.[8]

Here is why proof of the existence of concrete not-being as privation is important. When the truth of a concept is confirmed by pointing to the existence 'outside the mind' of single objects representing it, which are *in actu*, their actuality signifies 'individuation' of the form through its 'uniting' with matter. As regards the sublunary world, the world of generation and corruption, Ibn Sina and his successors described this 'individuation' as the result of the activity of the 'active intelligence' that they called the 'Giver of Forms' (*Dator formatum*). And when allowance was made for forms being 'individualised', or 'taking root' in matter, or 'uniting with it', and for matter's obtaining them from the Giver of Forms, an illusion was involuntarily got that forms were self-sufficient entities in their being, existing without matter, and that there is a real, and not just a logical, difference between essence and existence. Ibn Rushd apparently inclined to such an understanding of Ibn Sina's point of view (we shall come back to this later). But we know that neither Ibn Sina nor his immediate pupils recognised self-existing forms and a real difference between essence and existence. Their affirmation that existence was not added to the essence of a thing even when it was a privation as a disposition of matter to 'receive' a corresponding form, is proof of that.

Some scholars, who do not share the opinion that Ibn Sina recognised a real difference between essence and existence, substitute 'instantiation' for the term 'individuation', signifying the following: if we say that A exists, we mean by it that a class of objects A, of which we have a mental concept, is represented by single objects outside the mind. This argument, which makes it possible to avoid deceptive associations connected with terms like 'individuation', also holds in regard to privation: affirmation of the existence of such a not-being also implies a correlation of the concept with a concrete individual object, although this object has no actual being.

Let us note, in passing, that the thesis of the existence of not-being as privation serves as evidence of the existence of an objective foundation for what the *falasifa* called primary matter: if matter (*madda*) served as the substratum (*mawdu'*) for an actualised form, there surely must also exist some receptacle (*makhall*) for the potential form, namely prime matter (*hayula*), since an object before existing *in actu* must exist *in potentia.*

The Islamic Aristotelians (Farabi, Ibn Sina, Ibn Bajja, Ibn Rushd) quite definitely affirmed that form did not enter matter from outside but was actualised in it through the influence of internal and external factors. We shall touch, below, solely on how Ibn Sina interpreted this process, since that will bring clarity into the question of the justice or injustice of the doubts expressed by Ibn Rushd in respect of his treatment of the origin of form in matter, and into the conception of 'constrained inclination' which Ibn Sina and Ibn Bajja developed (seemingly independent of each other).

Everything that experienced the effect of a certain object that functioned as a proximate effective cause of change obtained from it, according to Ibn Sina, not the quality itself 'acquired' in the process of change, but only its 'analogue' or 'likeness' (*mithal*). The heat of a fire, he said, affected a body only by transferring its analogue, heat, to it.[9] With the action of a remote cause something might be got at the end of the process that was quite different from what was at the beginning.

Furthermore, Ibn Sina wrote, it might be said apropos of this that the sun warmed and blackened, although the heat and blackening were not its analogues. But he would reply that he did not claim that every phenomenon arising in an object experiencing an effect through the influence of an object exerting this effect was present in the latter object, because it was only the analogue of the object exerting the action. He affirmed, he said, that the action of the proximate principle exerting an effect on an object experiencing this effect was exerted through an analogue, transmitted from the former to the latter. That was how it was, in particular, with the sun; it acted on the nearest object experiencing its action in such a way that it transferred its analogue to it, namely light. When the object absorbed the light, heat arose in it, so that it, experiencing the action of the sun, heated another object that experienced its effect, by transmitting its analogue to it, namely its warmth, with the result that this other object, receiving warmth, was heated and blackened by it.[10]

Starting from the theory of 'analogues', one must examine the conception of 'constrained'(*mayl qasri*) put forward by Ibn Sina and Ibn Bajja, which became known in mediaeval Europe through the translation of Ibn Sina's *Book of Healing* and Ibn Rushd's commentaries, in which there was information about Ibn Bajja's analogous doctrine (the term introduced here is a loan translation of the expression *inclinatio violenta*).

From the standpoint of Aristotelian physics natural movement was realised through the inclusion in the moving body of a striving to its natural place: if a heavy body did not meet an obstacle in its path, it would move toward the centre of the earth until it reached its surface, while a light one would tend to the periphery of the sublunary world. The source of constrained movement lay outside the body put into motion; its action on the body ceased immediately the body ceased to be in contact with it, and its further movement had as its cause the movement into which the body put the medium (air, water).

In the sixth century A.D. this conception had been reconsidered by John Philoponus, who considered that the movement of a body had as its subsequent source the force it received from the object that had originally put it into motion, that movement was therefore possible in a void, and that the velocity of a moving body depended on the magnitude of said force and the intensity of the resistance of the medium. Aristotle's theory was later disputed by Yahya ibn Adi (893-974), who translated into Arabic fragments of John Philoponus' commentaries on Aristotle's *Physics*.

Ibn Sina, following Aristotle, denied both the existence of a void and the possibility of movement in it (if it existed). Movement in a void was impossible, according to the Peripatetics, because it would have to have either an infinite or a finite velocity. In the first case it would be impracticable, while in the second its velocity would be expressed by some positive magnitude and that would not differ in principle from the velocity in filled space, which was absurd. Ibn Sina agreed with Aristotle as well as regards the division of spatial movement, not caused by will, into natural and constrained. The latter he characterised as follows: that a body moved from one proper place to another, but this movement did not happen of itself; its cause lay outside itself.[11] But that was while the moving body was in contact with the body that had put it in motion. But what happened, say, to an arrow after it had separated from the bowstring? Ibn Sina declined to explain its movement as Aristotle had done, namely by the action of the material medium that the arrow itself put into motion. If the arrow continued to move by virtue of being pushed forward through the air, he said, the velocity of movement of the air would have to be greater than the flight velocity of the arrow, and then the air would strike the wall before the arrow.

Ibn Sina resolved this problem by the principle of 'constrained inclination', according to which a thrown body continued to move because of an 'inclination' it 'received' from whoever threw it. This 'inclination' exerted a resistance both to the body's own natural movement and to other constrained movement. The 'inclination' was something additional to nature, differed from 'natural inclination', and at the same time was not numerically identical with the inclination in the body that put the given body into motion.

Ibn Bajja also rejected Aristotle's point of view, advancing his own conception in his commentaries on the *Physics*.

In modern terminology, one could say that the force of gravity, according to Ibn Bajja, is not essentially determined by the relation between the masses of different bodies but is treated as an absolute force of the body's self-movement, operating in the same way as the soul in an organic body. This conception of his rejected the essential role of the medium in the movement of a body, recognising for it only a capacity to operate as a braking factor. From that it followed that the force operating on the body through constrained movement, must also have an inner character, when the body separated from the object that gave it its original motion. The mechanism of the transmission of this movement was brought out in Ibn Bajja's commentaries on Books 7 and 8 of Aristotle's *Physics*. The essence of his arguments about this mechanism boiled down to the following.

A body that communicated motion to another body, in turn experienced an influence from the latter. This influence was manifested in the 'tiredness', experienced by the mover after contact with the moved. For an animate body its mover was its soul, and for an inanimate body a 'driving force' that the mover communicated to the moved. The mover's 'tiredness' might set in of itself, but could be the result of the efforts spent in putting the moved body, which resisted it, into motion. Ibn Bajja thus reduced the mechanism of the transmission of movement to an interaction of two opposing forces, viz., the force of the mover, which experienced 'tiredness' as a result of this transmission, and the force of the moved body, which was expressed in its resistance to being put into motion. So the mechanism of the transmission of motion was reduced to the action of the mover and the counteraction of the moved body that evoked the 'tiredness' of the mover. A body communicating constrained movement could experience 'tiredness'; but one moving of itself by natural movement did not experience 'tiredness'. The force of the mover in constrained movement, and the force of the moved body (resistance) were the same in nature; the difference between them was only quantitative, and they were therefore commensurate (at least theoretically). The force of the mover, moreover, exceeded the force of the moved body, which explained the latter's movement. In other words, movement was possible only when the 'action' exceeded the 'counteraction'. Ibn Bajja tried to apply his theory to investigation of the movement of a body along an inclined plane. In this case the 'tiredness', in his opinion, was proportional to the angle between the slope of the plane and the perpendicular drawn from the point where the body was, and prevented movement of the latter.

Ibn Rushd did not agree with Ibn Bajja's theory of constrained movement (and, consequently, with Ibn Sina's), defending Aristotle's point of view. Ibn Bajja's mistake, according to him, lay in treating a body's 'nature' as something different from its matter, suggesting correspondingly, that the matter was put into action by the form, in the same way as a heavenly sphere was by the intellect corresponding to it, or an organic body by its soul. In the view of Ibn Rushd himself, the mover and the body put into motion, with natural movement, were not entities in the body different from each other, and the body did not influence itself as the effective cause of its own movement. A body functioned as mover and moved only in regard to the external medium; its natural movement arose from a dynamic interaction with the corporeal medium. The principle putting a body into motion, he said, was not the 'nature' or 'gravity' included in it, but the physical medium that operated on it, insofar as it moved; the body, for its part, affected the medium to the extent to which it functioned as the driving principle. Thus, as regards the motion of a body, the medium was not some kind of accidental obstacle but an essential condition.

From the standpoint of the subsequent development of science, the dynamics of Ibn Sina and Ibn Bajja, which influenced the working out of the theory of 'impetus', undoubtedly represented an advance compared with qualitative principle of Aristotle's physics defended by Ibn Rushd. It made it possible to free physics from its rivetting to the 'visible' qualitative characteristics of movement. By denying the Aristotelian conception of the antiperistatic action of the medium on a thrown body, the theory of constrained inclination helped create a more abstract hypothetical model of mechanical movement that made it possible in the long run to apply mathematics to the study of physical processes. It opened the way to a more abstract posing of problems of the movement of such bodies, since it permitted their movement in a void, i. e. in conditions when the resistance of the medium was zero. For Aristotle's 'physicality', which strove to represent spatial movement sensually and descriptively, such a hypothetical model would have been absurd.

Apart from that, the theory of Ibn Sina and Ibn Bajja about natural and constrained movement challenged the dualism of the sublunary and supralunary worlds in Aristotle's cosmology, no less than the opposing of the earthly world to the heavenly in the traditional cosmology of Islam.

Islamic Aristotelians considered mechanical movement as only a partial case of motion in the broad sense; from their standpoint, correspondingly, natural and constrained movement was not limited just to the field of spatial movement. For them, in fact, natural movement was the movement of a stone to its natural place (falling), and the motion of heated water to its natural state (cooling), while constrained motion was the movement of a thrown stone upward and the heating of water. Spatial movement and qualitative change, moreover, were governed by one law, viz., natural movement occurred with acceleration while constrained movement slowed. In addition, both spatial movement and qualitative change were movements from opposite to opposite. Both spatial movement and movement in quality, it must be stressed, were no longer related to the quality that was considered in the context of the substratum-attributive model of being as something posterior as regards substance, but to quality-forces functioning as the nature of elemental bodies.

This made it possible to look for a parallelism to the 'transfer' of force from one body to another in movements as regards both 'where' and quality, as Islamic Aristotelians interpreted them. With a qualitative change the quality that arose in the body experiencing action differed numerically from the same quality in the body exerting the action on the first. Thus, to use Ibn Bajja's example, a reed, when it caught alight from a fire, did not receive even a fraction of the fieriness inherent in the fire from it, and was like any other fire in its fiery nature, so that the cause of the appearance of this fieriness in it could have been any other fire. But fieriness and warmth were a quality-force. Consequently, when a qualitative change occurred in the force that affected a certain body, a force of the same kind, though not identical with it in being, would arise in it. The same should be fair as regards spatial movement: when constrained movement arose the force acting on the body put into such movement was not transferred to it literally but caused a numerically different force, called constrained inclination.

This notion of the 'transfer' of force from one body to another during mechanical movement was no more indebted to realism and Platonism than the movement in relation to quality experienced by the reed set alight through the action of a fire, when it functioned as the cause of the origin of an 'analogue' of its own fieriness in the reed. This theory, breaking with the conception of an antiperistatic action of the material medium on a body moving in it, stemmed, however, from the premiss common to them both that the condition necessary for being in motion was *ipso facto* the condition for something to be put into motion by something. That notion was eliminated by Newtonian mechanics, from whose standpoint uniform motion that encountered no obstacle or resistance was completed without the action of any motive force. At the same time the spatial movement described by Ibn Sina and Ibn Bajja was phenomenologically related to the motion described by Newton, since it was represented not as movement governed by the action of the medium but as the movement a body was in until the resistance of the medium or the action of another force removed it from that state. Constrained inclination, as the action of an immanent force acting in a thrown body, differed essentially both from the 'impetus' that represented the 'remainder' of the force applied to the body and from inertia in Newton's mechanics as the 'remnant' of the state (of rest or rectilinear movement).

The parallelism in the mechanics of the 'transfer' of force during spatial movement and motion in quality opened up, in potential, opportunities for applying mathematics to the investigation of physical phenomena on another plane as well. In this type of qualitativism there was an opportunity for quantifying qualities, since quality, being a force, admitted in principle of being measured and evaluated quantitatively. But even greater opportunities for this were created by the Islamic Aristotelian's subsumption of both qualitative forces and forces operating during mechanical movement under a single ideality (described by them as an aggregate of forces inherent in bodies by nature).

In fact, it followed from the above-mentioned argument of Ibn Sina's about the series of qualitative changes caused by sunlight (light—heating—blackening), that Islamic Aristotelians, relying on the concept of quality-forces, came very close to the idea of the transformation of energy. They also described the process of heating and ignition of bodies as a result of mechanical movement, through friction, which they characterised as a special 'vibration'. Finally, the transition of qualitative changes into quantitative during heating and cooling was well known to them. All that, in combination with the idea of the transmission of 'analogues' of forces and quality-forces from one body to another during movement in the broad sense, made it possible in principle to attempt a quantitative evaluation and quantification of qualitative phenomena. But that possibility proved unrealisable in the science of the Moslem Middle Ages.

But the idea of the unity of forces operating at the different levels of the cosmic hierarchy and at different levels of the organisation of matter realised its cognitive, scientific possibilities in another field of physics, viz., in the doctrine of a continuous connection between the inorganic and organic worlds.

THE CONTINUUM OF PHYSICAL BEING

The continuous link between the inorganic and organic worlds was very characteristic but partial sphere in which Islamic Aristotelians' continualist approach to explanation of the hierarchy of being was manifested. In Ibn Sina's *History of Hayy ibn Yaqzan* this approach of theirs was demonstrated in an extremely graphic way by the mental journey of the author's 'Ego' through the philosophical cosmos, the two extremes of which—in the West and in the East—signified the corporeal and the non-corporeal (spiritual) worlds; the author imperceptibly traversed the path from West to East, from primary matter to first intellect, and further to the necessarily existent in itself, from the realm of full darkness to that of never sullied light, encountering only half-tones on his way and nowhere a boundary dividing the inorganic from the organic, the sensible from the intelligible.

The hero of the romance began his mental journey through the existent from the shores of the 'slimy' watery expanses mentioned in the Koran, which here symbolised primary matter. The region located in this watery expanse was populated by 'outlanders who had arrived there by chance', who contrived to get hold only of sparkles of light when the sun set. The sun was the embodiment of forms; the 'outlanders'. i.e. principles foreign to primary matter in their metaphysical status, and the sparklets retained by them from the sun, were to symbolise the first determinations of matter. What then were these first determinations?

Islamic Aristotelians differentiated matter both semantically and terminologically, as a receptacle in an unconditional sense, i. e. as pure potentiality, and also as the substratum that was potentiality and actuality. The former they called *hayula* (primary matter or *prima materia*) the latter *madda* (matter). For Aristotle *prima materia* was an indeterminate receptacle that could only be intelligible, namely as some x in the proportion: 'the matter of copper is to the form of a copper sphere as x is to any possible form'. The concept 'itself', moreover, owed its origin to Aristotle's solution of the problem of absolute genesis (i. e. of the origin of substances), which could not be combined with his schema of opposites (a substance did not figure as the opposite of another substance) without introducing a concept of potential being (concrete being or existence was counterposed to concrete not-being as the potential of another). Consequently, when he spoke of *primary matter*, he had in mind above all the sublunary world, the world of generation and corruption, formed of the four elements. It is not surprising, therefore, that his first determinations of matter were elementary forms.

These forms, however, could not be attributes of matter. Since the forms of earth, water, air, and fire turned into one another, and all together differed from the matter of heavenly bodies, matter proved to be without permanent proximate characteristics, which created a certain break in the continuum of being, namely between matter and substantial forms. It is perhaps legitimate to regard that as an imperfection of Aristotle's overcoming of Plato's dualism of *eidos* and *prima materia.* This break was eliminated in a dual fashion in Islamic Aristotelianism. Ibn Sina introduced the concept of corporeal form as an immediate and permanent characteristic of matter, i.e. matter in general, in consequence of which *prima materia*, conceived as matter in general unrelated to its involvement in concrete being, was something really existent with all changes of species forms. According to him, a body was a substance in which length, breadth, and depth could be indicated or supposed. Matter, by its nature, was the substratum for the three dimensions, and they formed 'part of its existence', being, however, outside the essence of matter, since they were not identical with corporeal form. This was obvious, if only because it was characteristic of them to be greater or less, while the concepts of greater and less were inapplicable to the form of corporeality and to any substance.

The metaphysical status of the three dimensions (or of determinate extension) was that of accidents. And the point was not altered by the fact that some bodies would have one permanent volume from time immemorial; for blackness of skin was also a permanent attribute of the Ethiopian, yet it did not constitute his form.

It was a matter here of heavenly bodies invariable in all respects (except movement in a circle), that Ibn Sina was speaking about in his allegorical story: the inhabitants of that region (he wrote) had settled there so stably that the newcomers did not poach settlements from each other by force, and each community had a definite sector of land that no foreigner seized as a reward for victory.[12]

Unlike Ibn Sina, who classed extension as a quantity since he imagined it as the three-dimensionality of a definite body, Ibn Rushd (and before him also Ibn Tufayl) introduced the concept of indeterminate extension and made it precisely the first determination of matter, which did not depend on the body's concrete dimensions and which therefore belonged to the category of substance. This conception must be considered a most important point in Ibn Rushd's philosophy that also explains his divergence from Ibn Sina in views of being (about which we shall speak below), and his contribution to the development of philosophy in general.

The significance of this innovation in the hylemorphic ontology of Aristotelianism was brought out in a very close way in its confirmation of the immanence of the forms of matter as such and its leaving no room for any other interpretations of the relation of form and matter that could in any way suggest the idea that the former was introduced into the latter from outside, or as from outside. That was precisely how Giordano Bruno appreciated this conception of Ibn Rushd's. In his dialogue "On Cause, Principle, and Unity", Giordano Bruno had Theophile say that Averroes meant

> that matter in its essence comprises the indeterminate dimensions—wanting to indicate that the latter come to be determined sometimes by this figure and dimensions, sometimes by such and such others, according to the changes in natural forms. In this sense we see that matter emits them as from itself and does not receive them as from outside.[13]

Ibn Rushd spoke concretely in *De substantia orbis* about the role of extension as a necessary differentiation of forms, and of their change in the materical substratum, in connection with description of the transition from qualitative to quantitative changes and vice versa, saying that all that agreed with what appeared by virtue of sence perception; a heat-producing body acted on water, the latter increased in its dimensions, which approximated to these of the air. Furthermore, he said, when water attained the maximum dimensions possible in water, the object was liberated from the form of water and the maximum dimensions proper to it, and acquired the form of air and a magnitude of dimensions characteristic of the acquired form of air. The opposite happened, he added, when a cold-creating form acted on air. But as for dimensions in the non-relative sense, namely those in relation to which the word 'body' was used in its non-relative sense, prime matter was never free of it, just as it was never free of other accidents common to all bodies that changed into their opposites, or to two or more of them, for example, of the property of being transparent, common to fire and air.[14]

That primary matter was never liberated from accidents common to all or some bodies was a legitimate conclusion from the proposition that it had a permanent characteristic, viz. indeterminate, indefinite extension. For Ibn Rushd matter became qualitative; it ceased to be just an intelligible entity, the idea of which could only be obtained indirectly and, moreover, in a negative way, viz., by means of abstraction from all conceivable forms. Matter, just as primary matter, he characterised, for the first time in the context of Peripatetism in general (and not only in Islamic Aristotelianism) as the substratum for sensual reality and so 'rehabilitated' it, bringing it out of the state of 'half-being'. In his commentaries on Aristotle's *Metaphysics*, Ibn Rushd said that, if matter were treated only as that which lacked individual form, as only purely intelligible entity, this was equivalent to reducing it to nothing, to pure not-being. That being so, he wrote, then that (thanks to which matter differs from not-being and functions as something that exists outside the soul), is nothing other than that it is the substratum for a sense-perceived, visible, single, individual object and not what is conceived in it. That is the full concept of matter, he said, adding that the Sage (i.e. Aristotle—*Authors*) did not mention this anywhere.[15]

It must be admitted, nevertheless, that Ibn Rushd's innovation did not make his conception of matter something counterposed in principle to the idea of it of Ibn

Sina and other Islamic Aristotelians. It is worth noting in this respect the 'as if' used twice in the citation from Giordano Bruno above; the difference between Ibn Sina and Ibn Rushd is that the former treated spatial dimensions always as definite, concrete, and consequently concomitant, accidental elements ('outlanders' 'who had arrived by chance'), but for the latter they were indefinites, as extension in general, identical to form in its ontological status, or what Ibn Sina called 'corporeality'. It is clear that, within the context of Ibn Rushd's philosophy, forms, changes of which were accompanied with modifications of spatial dimensions in matter itself, were generated 'as' from primary matter itself, while in the context of Ibn Sina's philosophy they came into it as from outside. For, in Ibn Rushd, form was correlated with matter in general, but with Ibn Sina with a concrete body.

That is obvious, in particular, from how Ibn Sina proved the inseparability of bodily form from matter. If matter existed free from material form, he said, it would either be an existent, that could be pointed to, or not. If it were such an existent, then it would have certain sides or aspects, and consequently limits. But it would have them only when it was divisible and corporeal, whereas it had previously been supposed that it lacked corporeal form, i. e. was incorporeal. If matter were an existent that could not be pointed out, then, when it acquired corporeal form, the place where the form had to exist would not differ in any way from all other places quite identical in their nature. Nevertheless the place where primary matter acquired corporeal form had to be singled out from all others; consequently, it could be pointed out, although the opposite had previously been supposed. All that meant that matter was never without corporeal form.

Ibn Sina's idea of the relation of matter and corporeal form can be expressed in general as follows: corporeal form as such was prior to matter, but matter was prior to corporeal form in its concrete being, and consequently was prior to the attributes of corporeal form, i. e. spatial limitation and shape. Since the quantitative characteristics of objects were inseparably linked with their qualitative ones (for example, when some elements were converted into others), then the qualitative characteristics were indirectly dependent on matter just like concrete dimensions, boundaries, and shapes.

The difference in 'point of reference' in the treatment of the relation of form and matter (matter for Ibn Rushd and body for Ibn Sina) left its impress on their explanation of the vital activity of the sublunar region of the world with its inherent continuous change of one form for others. Movement, according to Ibn Rushd, 'inheres necessarily in a substratum', and it

> is only possible in what is subject to rest, not in absolute non-existence, for in absolute non-existence there is not possibility whatever, or one would have to admit that absolute non-existence could be converted into existence. Therefore, the non-existence of privation which necessarily precedes the occurrence of a thing has to be connected with a substratum, and will be disconnected from it when the substratum actually receives this occurrence as happens with all contraries. For instance, when a warm thing becomes cold, the esssence of warmth does not change into coldness; it is only the receptacle and the substratum of warmth that exchange their warmth for coldness.[16]

But since movement was a necessary attribute of matter, the latter functioned as the cause of generation and corruption.

> As non-existence by itself cannot change into existence, and existence by itself cannot change into non-existence, there must be a third entity which is the recipient of both of them, and that is what is described by 'possibility' and 'becoming' and 'change from the quality of non-existence to the quality of existence'. For non-existence itself is not described by 'becoming' or 'change'; nor is the thing that had become actual described in this way, for what becomes loses the quality of becoming, change, and possibility when it has become actual. Therefore there must necessarily be something that can be described by 'becoming' and 'change' and 'transition from non-existence to existence', as happens in the passage of opposites into opposites; that is to say, there must be a substratum for them in which they can interchange—with this one difference, however, that this substratum exists in the interchange of all the accidents in actuality, whereas in the [transition from non-existence to existence of a] substance it exists in potency.
>
> ...Both philosophers and Mu'tazilites agree about the existence of this entity (i. e. the nature of the material substratum formed by corporeality or extension with the philosophers, and *ma'dumat* for the Mu'tazilites—*Authors*); only the philosophers are of the opinion that it cannot be exempt from a form actually existent, i.e. it cannot be free from existence, like the transition, for example, from sperma to blood and the transition from blood to the members of the embryo. The reason is that if it were

> exempt from existence it would have an existence of its own, and if it had an existence of its own, becoming could not come from it. This entity is called by the philosophers '*hyle*', and it is the cause of generation and corruption.[17]

A rather different picture is given us in the allegorical picture of the world of generation and corruption in Ibn Sina's *Hayy ibn Yaqzan,* in which matter is compared with a desert region. Every time, he wrote, that those who come there to master this place settled in it, it ejected them, and if some settled down in it all the same, whatever they developed all led to disruption, and although they built houses everything crumbled to dust. It was a region of eternal struggle of opposites, a world of constant becoming and disappearance of forms; discord incessantly arose among its inhabitants, leading to killing and murder.[18] But, for all these perturbations, primary matter never remained formless, because formlessness would have meant absolute not-being for it; primary matter (he said in his *Treatise on Love*) was like an ugly woman who was afraid lest her ugliness be discovered; every time her veil opened she covered her defects with her sleeve.[19]

He gave exactly the same value characteristic of primary matter in his *Hayy ibn Yaqzan*: this region was a devastated territory, a saline desert, full of discord, unrest, enmity, and wickedness, that borrowed beauty and joy for itself from a remote place, because 'beauty and joy' were being, definiteness, and unity.[20]

Thus, whereas for Ibn Sina primary matter was a combination of 'spaces' (in Arabic *ahyaz*) each of which was determined in being by factors external to it insofar as a disposition (*isti'dadat*) arose in them to accept some form or another, for Ibn Rushd it was a single formation in which the action of these factors occurred within itself and not outside.

What Ibn Sina designated as the 'beauty and joy' of the sublunary world was the result, on the cosmological plane (according to Islamic Aristotelians), of the influence exerted on life by the heavenly world, the forms of which were fixed forever for each unique in species heavenly body.

The difference between these two worlds was governed by the difference in the matter forming them; the sublunary world consisted of four elements with their inherent two pairs of opposite qualities (warmth and cold, moisture and dryness), while the celestial world consisted of a homogeneous substance, ether. The elements were classified in accordance with their relation to activity and passivity, because these characteristics were necessary conditions of their interaction, which meant, as well, the genesis of things.

The paired combination of primary qualities in the elements ensured continuance of the intertransfer of elements, since, if only one quality were ascribed to each element (as was done by the Greek naturalist and physician Philistion, the successor of Empedokles), there would be breaks in the cycle of the mutual transfer of simple bodies. These transfers were caused by the interaction of the active qualities (heat and cold) on the one hand, and of the passive ones (moisture and dryness) on the other.

As with Aristotle, the elements were considered on a dual plane in the physics of the Islamic Aristotelians. On the one hand they were abstract, speculative constructions formed of two irreducible elementary qualities. On the other hand they were real elements in which the relation of the qualities was displaced to one side or the other, which showed the existence of degrees of these qualities. That circumstance, in turn, was the basis of the diversity and creative power of the world of generation and corruption (of coming to be and passing away).

Each of the elements had its natural place and natural shape. Their natural places were determined by lightness being associated with warmth, heaviness with cold, and by the warm and dry being lighter and the warm and moist heavier, the cold and moist lighter and the cold and dry heavier. Therefore, at the bottom, closer to the centre of the universe, there was earth; after it came water, air, and fire. The simple bodies, including the ether, had a spherical shape characteristic of them and were one within the other, not separated by a void. The whole world was consequently a single body, the Peripatetics said, noting the continuity of the combination of bodies forming the Universe. The Islamic Aristotelians interpreted the formation of minerals and their properties, following Aristotle, by a theory of the interaction of a mixture of the elements and the four irreducible qualities with the vapour and smoke contained in the bowels of the earth. They divided the minerals obtained through this interaction into four groups: stones, fusible substances, sulphurs and salts. The properties of minerals were determined, in particular, by different combination of the four main qualities in them which thus manifested their objective nature: it was characteristic of the moist (wet) to flow and be viscous, of the dry to be dense and free-flowing or granulated, and so on. Like the legendary alchemist Jabir ibn Hayyan, Islamic Aristotelians explained the origin of metals by the combining of sulphur and mercury, sulphur being a principle for them rather than a chemical element in the modern sense; so any substance could be characterised as 'sulphurous'. Metals formed a hierarchical system, which ensured a gradual transition from less perfect formations to more perfected ones.

For the *falasifa* the realms of nature differed because of the greater or less commensurability of the mixtures of elements in the bodies that represented them; the more commensurable they were the higher was the rung they occupied on the ladder of physical being. The proportions in which the four elements were combined in an organism also ultimately determined the vital activity of people through their characteristic temperament, which was governed by a predominance in them of blood connected with fire, or yellow bile connected with air, or phlegm connected with water, or black bile connected with earth.

After filling the gap in the hierarchy of physical being between form and matter left by Aristotle, Islamic Aristotelians' first concern was to prove the gradualness of the transition of inanimate matter into animate. As we have already mentioned, the idea that the life of the Universe was determined by the activity of a single cosmic force manifested differently in the inorganic and the organic worlds, was for them the basis for the conception of a continuous link between the two worlds. The material substratum for its activity was one. Bahmanyar wrote that two objects were called one 'soul' and the other 'nature', not from the angle of their substance but insofar as they were the principles of action. If one began to seek an appropriate category for them, one would do so as they were essential accidents and not constituent attributes. That was why, he said, these principles were examined in physics; for, as the principles of movement, they were studied from the angle of their link with matter and movement.[21]

The existence of these principles, according to Bahmanyar, was established in a purely empirical way by observing bodies in which there were actions: any body in which there was action had the principle of that action, and actions were consequently a cause of the body's having that principle, and were not governed by it as their cause,[22] since (as noted above) the concept of corporeality did not contain concept of cause of action. Now, if one turned to the body of a living creature, one discovered that it consisted of elements and mixtures of elements capable of sense perception and free movement, and of feeding and growth, and that it had to make good what had decayed in it. None of that was inherent in it because of corporeality, from which followed the necessity of something distinct from the corporeality existing in it, which was called 'soul'. Soul was thus only another name for signifying the unity of the organism, be it animal or vegetable, because (Bahmanyar argued) there was a property of the bodies of animals and plants that each did not have when its parts were taken separately. The existence of the parts was consequently potential, because everything that had unity, i. e. actual unity, had parts that existed potentially, just as ten was an actually existing number though its units existed in it potentially.[22]

There were thus two types of an organism's unity: unity of its body as an actual continuity, in relation to which its parts only existed potentially; and a unity of the organism itself as a functioning whole whose parts were no longer parts of a body as a single, continuous magnitude, but parts of a concrete animal or concrete plant. In that sense the soul was the cause of the organism's unity. Since an organism was substance, and the cause of the existence of substance could only be substance (and not accidence), the soul must be substance. The soul, the material substratum of which was the spirit (*ruh*) or pneuma, was defined by the Islamic Aristotelians (as by their teacher—Aristotle) as a first perfection or entelechy of a natural organic body capable of life.

The *falasifa* began their study of psychic forces with an examination of the nutritive faculty functionally preceding all of them, and they noted, precisely at this lowest level of physiological departures, the absence of a hard and fast line between inorganic and organic bodies. Since nutrition (Ibn Bajja said) was realised by means of special organs, the question arose whether such entities as fungi, which consisted of homogeneous parts, i.e. lacked specialised organs, should be classed as organic, or inorganic bodies, although they were capable of growth and consequently of nutrition. The intermediate position of the nutritional force (which Islamic Aristotelians called 'soul', like other psychic forces) was emphasised by pointing out that doctors applied the word 'nature' to the nutritive soul, meaning by that the motive soul, i.e. the principle of essential movement, such as nature also was.

The continuum of inorganic and organic nature at this level of a body's vital activity was as well revealed in material substances' being only gradually converted, in the process of assimilation, into the body of a plant or animal. In fact, food was potential or actual; potential food was either remote (for example, water or earth), or proximate (for example, a plant or meat for an animal). Proximate food, for its part, had a different degree of closeness according to its consistency to the organ of the feeding body assimilating it. The food assimilated by an animal was more remote, for example, when it was put into motion by the nutritive faculty, or the moisture contained in the roots of plants; the blood flowing in the veins, or its analogue in plants, the milky juice or sap, was closer. Finally, the most proximate food, on which the process of assimilation was completed, was blood, which was converted into flesh, or sap, converted into vegetable fibres. That is why there was no contradiction between stating that food was formed from the unlike, and stating that it was formed from the like; in the first case potential food was implied, and in the second actual.

Ibn Rushd demonstrated the absence of an impassable boundary between inanimate and animate nature by citing this interpretation of the assimilation of food, and a number of other arguments.

According to him the soul lived during full performance of its functions both when its activity was partially slowed down by sleep, and when the body controlled by it died, so that only certain parts of it remained, which were returned to 'the subtle imperceptible bodies'.[23]

To the theologians' claim about God's capacity to create man directly from earth, Ibn Rushd counterposed the philosophers' doctrine that man went through all the intermediate links that separated him during his formation from the elementary state of matter. When speaking of the religious dogma that the forefather of men came straight from the hands of the Creator in such a way as to be a human being, Ibn Rushd remarked that the philosophers said that,

> if this were possible, wisdom would consist in the creation of man without such intermediaries, and a creator who created in such a way would be the best and most powerful of creators.[24]

The philosophers, Ibn Rushd wrote in *The Incoherence of the Incoherence*,

> do not disagree about the fact that there are in the elements souls creating each species of animals, plants, and minerals that exists, and that each of them needs a directing principle and preserving powers for it to come into existence and remain.[25]

With the reservation that 'none of the old philosophers' disagreed as to whether these souls were identical with the souls in the generally accepted understanding of the term (earlier he had compared their action with magnetism), Ibn Rushd directly identified their functions with those of the 'bestower of forms', i.e. the 'Giver of Forms' (*Wahib as-suwar*, or *Dator formatum*), or active intellect in the philosophy of Ibn Sina.

Further on in the same work we find an argument of Ibn Rushd's about sleep as an analogue of death:

> The comparison of death with sleep in this question (in the sense that the question of the soul is obscure—*Authors*) is an evident proof that the soul survives, since the activity of the soul ceases in sleep through the inactivity of its organs, but the existence of the soul does not cease, and therefore it is necessary that its condition in death should be like its condition in sleep, for the parts follow the same rule. And this is a proof which all can understand and which is suitable to be believed by the masses, and will show the learned the way in which the survival of the soul is ascertained. And this is evident from the Divine Words:

> 'God takes to Himself souls at the time of their death; and those who do not die in their sleep'.[26]

Ibn Rushd was a determined opponent of the conception of the immortality of the individual soul, and of course did not link the religious dogma created (as he remarked in the arguments cited above) for the needs of the masses or multitude with the analogy of the state of the soul during sleep and after death of the body. In order to understand his arguments cited above, they must be correlated (1) with the idea that certain 'parts' of the soul were returned after death to the 'subtle imperceptible bodies'; (2) with the verse from the Koran, similar in content (with a correction, of course, to its symbolic, allegorical interpretation), that God takes unto Himself the souls of both the dead and the sleeping; (3) with the example he cited to illustrate his thesis that the 'decay of the act of the form through its substratum was similar to the decay of the act of the artisan through the deterioration of his tools'.[27] And, he added,

> this is still more evident in those animals which live when they are cut in two; and most plants have this peculiarity, although they do not possess the faculty of perception.[28]

These citations are evidence of Ibn Rushd's conviction that the power to produce life in its most rudimentary forms lay in the very foundation of matter, and that the material substratum for this power spread into cosmos (heavenly bodies) in the form of 'subtle imperceptible bodies', and remained there after the forces of the organic body had ceased to function. We can get a characterisation of this intimate force, capable of generating the living, from the indirect indications about it in *The Incoherence of the Incoherence*:

> He who claims the survival and the numerical plurality of souls should say that they are in a subtle matter, namely the animal warmth which emanates from the heavenly bodies, and this is a warmth which is not fire and in which there is not a principle of fire; in this warmth there are the souls which create the sublunary bodies and those which inhere in these bodies. And none of the philosophers is opposed to the theory that in the elements there is heavenly warmth and that this is the substratum for the potencies which produce animals and plants, but some of the philosophers call this potency a natural heavenly potency, whereas Galen calls it the forming power and sometimes the

> demiurge, saying that it seems that there exists a wise maker of the living being who has created it and that this is apparent from anatomy, but where this maker is and what His substance is too lofty a problem for human understanding.[29]

While Ibn Rushd came close to the problem of the need for a more concrete explanation of this question, he limited himself to pointing out that philosophers had not given a satisfactory proof of their doctrine of the origin of man from inanimate matter through intermediate links, and added:

> But you, reader, consult your heart; it is your duty to believe what it announces, and this is what God—who may make us and you into men of truth and evidence—has ordained for you.[30]

There was nothing surprising in the existence of evolutionary guesses in Ibn Rushd, since evolutionary ideas were in the air, so to speak, in the mediaeval Moslem world, and were crystallised in more or less clear expressions in the works, for example, of the Brethren of Purity, Nizami al-Kanjawi, Nisami al-'Arudi as-Samarqandi, and Ibn Miskawayh. The idea of man's development from inanimate nature through intermediate stages constituted the core of the allegorical treatise of Ibn Rushd's older contemporary and friend, Ibn Tufayl. In his version life originated in the area of the equator from fermenting clay, which, after several years of fermentation, acquired proportional fractions of warmth, cold, moisture and dryness. The elements were mixed differently in its various parts, its middle being distinguished by the most proportionate mixture; a smallish bubble formed there divided in two by a film, and filled with a gaseous body. And then, Ibn Tufayl wrote, a 'soul' coming from above was drawn into this body, and so strongly attached to it that it would be impossible to separate it 'either by feeling or by reason'. Comparing this 'soul' with sunlight, Ibn Tufayl said that it did not exert any effect on some bodies (for example, minerals), had a small effect on others (plants), and exerted a strong effect on the third group (animals). Just as bodies were found among those with a smooth surface that were capable not simply of reflecting but could also reproduce a likeness of the body, so there were animals that not only 'reflected' but also 'reproduced' the 'soul', adopting its image which was characteristic only of man.

The abiogenesis of a naturalistic type described by Ibn Tufayl coincided with the ideas mentioned above of his younger contemporary Ibn Rushd. Ibn Tufayl's 'soul' coincided with Ibn Rushd's 'subtle imperceptible bodies' and with *pneuma*, different interpretations of which had come down to the Arabs from post-classical philosophical and scientific thought. This life-generating principle may be related to the Stoics' understanding of *pneuma* as a very fine or subtle, extremely mobile formation that was a mixture of fire and air, which they identified with a pancosmic immanent divinity that united the Universe by its vital 'breathing' into an integral organism, as a soul-body. Ibn Tufayl's indication that his 'soul' influenced, with a different degree of intensity, the generation and formation of forms of life of different levels of organisation had something in common with the Stoics' doctrine of a different level of the *tonos*, or 'tension', of a *pneuma*, which formed a hierarchy: the lowest degree, which imparted unity to minerals; nature, which ensured the growth of plants; the animal soul; intellect. Ibn Tufayl's notion of 'spirit' as the bearer of the soul (as with other Islamic Aristotelians), which was concentrated in the heart, also coincided with the Stoics' interpretation of *pneuma*; and so did his placing it, at macrocosmic level, in the ether, i.e. in the heavenly world from which Ibn Rushd's 'subtle imperceptible bodies' descended. At the same time the latter's endowing of these bodies with the function of the 'bestower of form' reminds us of the Stoics' interpretation of *pneuma* as a pancosmic divinity—Logos.

The natural warmth characteristic of *pneuma*, according to the *falasifa*'s doctrine of the soul, was the organ of the nutritive faculty, the lowest capacity of the vegetative soul, which was defined as the first perfection or entelechy of a natural organic body to the extent that it fed, grew, and multiplied. This faculty not only made up with food for that which the organism lost through its vital activity, but also enabled a body to grow until it attained a certain size, on the achievement of which its existence reached completion. This process was regulated by the faculty of growth, which was related to the nutritive one as the form was to matter.

Feeding bodies were divided into the reproducing and non-reproducing. Non-reproducing ones differed in that they were generated by bodies of another species than that to which they themselves belonged. These bodies were only capable of maintaining their own existence as individuals; the existence of their species was ensured by a mover that functioned as a form of bodies existing in the air and water. Creatures arising through self-generation belonged to this category of feeding bodies.

As for reproducing bodies, they were generated by bodies of the same type as themselves. The function of the nutritional faculty during reproduction was to realise 'extended reproduction' of food that was used to form semen as well as to ensure growth; all the other processes were realised through the faculty of reproduction. The difference between it and the nutritive faculty, Ibn Bajja wrote, was that the latter converted what were potentially parts of the body into actual parts, while the reproductive faculty converted what was *in potentia* a given species into a body belonging to this species and had no relation to the parts of the body.[31] When an organism aged, the nutritive faculty parted from the reproductive one and existed alone, maintaining only 'simple reproduction' of food, since by that time the organism did not need a surplus of nutritional substances for its growth. The nutritive faculty, he wrote, served as matter, as it were for the faculty of reproduction; the faculty of growth served as a preparation as it were, while that of reproduction served as the end, and the nutritive faculty had no more perfected force than that.[32]

The faculty of reproduction thus crowned those powers of the soul whose mission it was to maintain the purely physical existence of organic bodies and which formed the vegetative soul. In this role this force ensured a special place for multiplying creatures in the hierarchy of being: the continuous existence of non-reproducing species of feeding bodies consisted in the succession of their existence, while reproducing species occupied a middle position between the highest level of existence, i.e. absolutely necessary existence, and the lowest level, i.e. that at which necessity signified succession.[33]

The animal, which had a more harmonious mixture of elements than a plant, had a soul defined according to the activity it performed as a first perfection of the natural organic body to the extent that it perceived the individual and was capable of voluntary movement. The faculty of movement was divided into motive force and impelling force, which in turn was divided into the faculty of anger and the faculty of longing. The faculty of sensation underlay an already qualitatively new level of development of psychic faculties related to cognitive activity, which calls for special consideration.

ON THE COGNITIVE FACULTIES OF THE SOUL

Sense perception, according to Islamic Aristotelians, was a special kind of change; so there had to be something varying and motive, and something variable and moving. In sensation the sensually perceived was the motor and the sense the moveable. It was a feature of the motor's action during sense perception that it was more obvious than in other cases, when it was hidden or latent. A faculty of sensation had to be necessarily in matter, namely in the organ that likened the sensed object, as it were, when perceiving the latter's form. Each perceiving faculty was a first perfection or entelechy of its organ, when it did not function and the last when it did.

The faculties of sense perception were divided into external and internal. The external included vision, hearing, smell, taste, and touch. Ibn Sina considered the sense of touch a faculty that could be considered a genus embracing four species of forces located in the skin and specialised so as to distinguish the opposites of hot and cold, dry and moist, hard and soft, and rough and smooth.

The faculty of seeing was the first entelechy of the eye; when it operated it became sight, i.e. the last entelechy. The first object of vision was light seen by the eye through the transparent medium when the object contemplated was illuminated. The source of light was an illuminating thing, while the light itself was an entelechy of the illuminated object as such. Illuminating objects were spoken of secundum prius et posterius: viz., as of prior to or preceding (for example, of the sun and fire);

as of posterior—of the moon and bodies with a surface capable of reflecting light. Phosphorescent objects of all kinds shone but did not illuminate anything since earthiness predominated in their composition. The colour and configuration of an object (since colour was a surface, and any surface had a definite shape) was perceived by sight essentially, but substance accidentally.

The faculty of hearing was the entelechy of the sense of hearing, and its function was to perceive 'impressions' arising in the air or water from the collision or impingement of two objects. The ear possessed the property that reverberation occurred in it, due to which sound was preserved in it, i.e. had a definite duration. Musical instruments like the lute operated on that principle. Since the first object of aural perception was air, and the 'sounding' objects themselves were only perceived accidentally, hearing could be mistaken, exactly as happened with optical illusions. This circumstance was exploited by conjurers and mimics; conjurers (Ibn Sina wrote) could persuade us to imagine the rumble of thunder and mimics to hear sounds allegedly made by various objects, so that these seemed to be present, although they actually were not.[34]

The faculty of smell perceived odours conveyed into the nose by air, odours that were either mixed with vapour in the air or were imprinted on the air by the effect of some odorous body or another. The object of the sense of smell was related to the taste quality so that the taste qualities of an object were often recognised by the odours emanating from them. The sense of smell was more strongly developed in animals than in man, since it served as an important means for their finding food and consequently for maintaining their existence. The sense of smell could also be mistaken, since many solids were capable of retaining the odours of other objects with which they had come into contact.

The peculiarity of taste qualities was that they were absent in pure water, clean air, and dry bodies like sands. Sea or bog water had a taste because 'wetness' was mixed with 'dryness' in them (this point was a graphic example and evidence that Islamic Aristotelians, like

Aristotle, were far from treating qualities as just subjective sensations). Since matter of taste quality was moist, this quality did not arise when the perceiving organ and the perceived object were dry. Saliva, therefore, was a mixture of wet and dry on the one hand, and on the other did not have its own taste qualities so as not to hamper perception of the taste qualities of other objects. Like smell, taste was a vitally important sense for most living creatures. Only a few species lacked it, such as sponges or echinoderms, for which a sense of touch was sufficient to provide them with food. The way of life of these creatures bordered on that of the vegetable kingdom.

The specific feature of tactile qualities was that they were inherent in absolutely all bodies; there were colourless, soundless, tasteless objects, and objects that did not emit a smell, but there was no object that did not possess some tactile quality or other. That circumstance determined the existence of a sense of touch in all species of animals without exception, so that an animal was such precisely because it had this sense. Bahmanyar wrote: the first of the senses, due to which an animal became an animal was the sense of touch, because an animal could not lose the faculty of touch and at the same time remain a living creature. For an animal consisted initially of tactile qualities so that its mixture was formed precisely of these qualities, and decomposition of them led to its death. The sense was the advanced scout of the soul, and the advanced scout should be a force or faculty that showed how to remove the obnoxious and to preserve the useful.[35]

Ibn Bajja asked a fundamental question in this connection (since the sense of touch was the last of the five internal perceptive faculties): could there be another, sixth sense of some sort? He answered that in the negative. There could not be a sixth sense because it was not present in man, which was evident to everyone. But perhaps it existed in some animal unknown to us? Such a hypothesis collapsed because man was the most perfect of living creatures, and it was impossible for a less perfect one to have something that the more perfect did not have. When, then, a less perfect creature proved to have organs that did not exist in the more perfect, their presence in it was evidence precisely of its imperfection. He gave as examples the donkey's lip, the elephant's trunk, and other organs that certain animals had. If it was considered that man had a similar organ, then it must be admitted that a donkey's lip or a trunk was an imperfect hand. If organs corresponded to the purpose of their existence, and their structure was determined by adaptation to attain that end (and man had all these organs or more perfect ones), consequently such a sense would necessarily have to exist in man, because we would otherwise have some more perfect creature.[36]

The Islamic Aristotelians, like Aristotle, did not recognise any special faculties for sensing the pleasant and the unpleasant, that could have been compared with the external and internal faculties existing in man. But whereas Aristotle limited himself to pointing out that a pleasant or unpleasant feeling was the activity of a 'sensing centre' directed to good and evil, the *falasifa* sought to discover a natural mechanism of the origin of this sensation, linking it with changes in the material vector or bearer of these forces, the 'spirit'. Whenever certain forms developed in the intellect or in some sense, passive states and changes occurred in the mixture of the spirit; if the form was pleasant, then it changed the mixture toward a quality pleasant for the heart, and the latter experienced satisfaction from it, but if it were unpleasant then the change was toward an unpleasant quality and the heart experienced pain and suffering from this form.

All that happened in the heart, not surprisingly, since it was precisely the residence of the spirit, because, according to Aristotle, who had no notion of the nerves (and equally of the role of the brain as the central organ of sense perception), it was the heart that was the 'sensing centre' mentioned above. Bahmanyar wrote that the pain caused to the heart by some thought or by grief was brought about by a change in the spirit leading to the development of a painful quality. The strongest and most stable of the pleasurable and painful states felt were characteristic of the sense of touch and heart, of all the organs, was distinguished by the most acute sense of touch, in view of which it experienced sufferings from this quality, the more so that the spirit had its beginning precisely in the heart.[37]

It is important to stress that the *falasifa* not only linked sensual suffering and pleasure, but also mental, with the heart and the material spirit concentrated in it. Bahmanyar wrote in his *at-Tahsil* that mental pleasure was also characteristic of us, that pleasure was also connected with the satisfaction felt by the heart. It is important to stress that, in particular, because it indicates the purely metaphorical character of the philosophers' arguments about the pleasure experienced by the virtuous soul 'in the other world', where there could not be either a material heart, which had long since rotted away in the grave, or the spirit that was in it, which was at best dispersed throughout cosmos.

The Islamic Aristotelians' particularly naturalistic explanation of the origin of sense perceptions and affects of the soul, however, did not in general deny the specific nature of the effect of the sensed object on the senses. This effect, it goes without saying, was not reduced to an interaction of qualities. An object experienced the effect of another object during the interaction of qualities so that this effect was transferred to it 'together with the matter'. The body of a living creature, for example, could be warmed, and even burnt, by the effect of heat. The sensation of warmth or heat was another matter; through it the form of the heat was perceived in the senses in the same way as the form of a seal was impressed on a lump of wax, but not the substance it consisted of. As Bahmanyar wrote, such a print appearing in the soul was the actually and essentially perceived object; the thing whose print it was, was perceived accidentally. Hence it was thought that the perceived object either existed outside the soul or did not.[39]

But here, too, the *falasifa* endeavoured to accentuate the idea of the absence of a hard and fast line between the natural effect of a body on another one and the effect that took the form of a sense perception. The vegetative soul was not capable of sensation, yet, all the same, the *falasifa* noted, plants like mimosa revealed the presence in them of a likeness of the lowest perceptive powers of the animal soul, i.e. the sense of touch, the same as the faculty of movement caused by sense perception.

The Islamic Aristotelians localised the external senses in the nerves; sight was a force located in the hollow nerve, which perceived the coloured form imprinted in the crystalline lens of the eye; hearing was a force located in the nerve distributed over the surface of the auditory canal; the sense of smell was a force located in the two mamillioform appendices of the front part of the brain; the sense of taste was a force located in a nerve spread over the tongue; the sense of touch was a force located in the nerves of the skin and muscles ('flesh') of the whole body.

The internal perceptive faculties included the common sense (*sensus communis*) or phantasy, a force which was located in the front ventricle of the brain, and which independently perceived form 'imprinted' in the five senses; a faculty of representation located in the rear of the front ventricle, which retained what the *sensus communis* received from the external senses and preserved after disappearance of the sense-perceived object; imagination (in regard to man it was also called the 'cogitative faculty' (*quwwa mufakkira*) —a faculty located in the central ventricle, near the medulla oblongata, by which various forms were combined and separated at will; an estimative faculty located at the rear of the central ventricle of the brain which perceived 'ideas' (*ma 'ani*) of objects of sensation; the faculties of retention and recollection located in the posterior ventricle of the brain. Such was the classification of the internal perceptive faculties of Ibn Sina and his successors in the Moslem East, which was distinguished by its very detailed and developed character.

Farabi distinguished four internal senses: the faculty of representation, the estimative, retentive, and cogitative faculties. Ibn Bajja and, seemingly, his follower in psychology Ibn Rushd spoke only of the *sensus communis*, imagination, whose functions included those of the estimative faculty (*wahm*) in Farabi's and Ibn Sina's classifications, and about memory.

The Islamic Aristotelians, holding a continualist interpretation of the hierarchy of being, endeavoured to find links mediating the transition from the world of irrational animals to the world of man as a rational living creature (*hayawan natiq*). In particular, Ibn Bajja called the ape the animal closest of all to the state of man. As regards the cognitive faculty of the soul, the mediating link between pure sensitivity and intellect was considered to be the faculty operating with ideas which was the estimative faculty for Farabi and Ibn Sina, and for Ibn Bajja and Ibn Rushd the imaginative.

This faculty perceived something like *gestalt* or a general representation in single objects. The difference between the perception of form and the perception of an idea, for Ibn Sina, was that form was perceived simultaneously by the internal and the external senses; only it was perceived first by the external sense, which then passed it to the internal sense as, for example, when a sheep perceived the shape of a wolf, i.e. its outline, appearance, and colour; the form of the wolf was perceived by the sheep's internal sense only when it had been perceived by the external sense to start with. An idea was perceived by the soul from the sense object without its being first perceived by the external sense as, for example, when a sheep perceived an idea of enmity in a wolf without its being first perceived by the external sense, or an idea forcing it to be afraid of the wolf and to flee from it.[40] The sheep thus not only perceived the idea of enmity in the wolf but also formed a judgment about this enmity, since according to the *falasifa*, a judgment was *mutatis mutandis* inherent in the lowest cognitive faculties.

Animals' capacity to have ideas or general representations also determined, according to Ibn Sina, their other capacity, which brought the animal kingdom close to the world of man, i.e. the faculty of creating 'artificial things'. Other animals (apart from man), especially birds, he wrote (not to mention ants) also had arts since they constructed lairs and dwellings, but this was related not to something that stemmed from inventiveness and reasoning but rather what stemmed from instinct and compulsion (i.e. their being 'forced' to it by nature itself—*Authors*), and was therefore not distinguished by variety and diversity, and in most cases was directed to ensuring the well-being of their species and to satisfying species needs and not individual ones.[41]

Thanks to the faculty of imagination, Ibn Bajja wrote in his *Book of the Soul*, an animal performed various movements. The longing part of the soul was put into motion by it, through which animals created artificial things and distinguished their young as ants and bees did.[42] The mention of ants and bees here was not accidental; both first of all, created 'artificial things' (anthills and hives), and secondly lived in communities. In his treatise "On Things by Which Active Reason Could Be Attained", Ibn Bajja put creatures living in communities precisely into the category of irrational animals in which there was clearly revealed a faculty of perceiving some general 'idea' in individual objects (that concerned wild birds because, unlike domestic fowls, they built nests for themselves and gathered in flocks).

The cognitive faculties were crowned by the rational faculty or rational soul characteristic of man, which was defined as the first entelechy of natural organic body to the extent that it performed actions through intelligent choice and reasoning, and insofar as it perceived the universal.

Just as the soul of a plant, apart from its specific functions, also performed actions peculiar to the forces of minerals, inorganic bodies, as the animal soul performed those of the vegetable soul along with its own proper actions, so the soul of man performed actions inherent in all these faculties, in addition to purely rational activity. These faculties did not act in isolation, but were in a 'ruling and service' relation to one another. According to Ibn Sina the estimative faculty served the intellect; memory and the aggregate of animal forces the estimative faculty; the impelling faculty and imagination the faculty of representation; the 'common sense' imagination; the external senses the 'common sense'; the faculties of desire and anger the impelling faculty; the faculty of movement found in the muscles served the faculties of desire and anger; the vegetative faculties, and above all the faculty of reproduction, served all the animal faculties; the faculty of growth the power of reproduction; the nutritive faculty served growth and reproduction; and the natural faculties all of these together; in the natural forces the grasping faculty on the one hand and the attracting on the other served the digestive faculty; and all these three natural forces were served by a fourth, the repulsive; the four irreducible natural qualities served these natural forces, and among these qualities cold served heat, and dryness and wetness served them both.

But the intellect was not only based on forces and faculties that 'served' it; it humanised and sublimated them. They in turn, however, strove to dehumanise man, and to degrade him to the animal level. Ibn Sina did not spare black colours (in his *Hayy ibn Yaqzan*) when describing the 'evil companions' of the author's Ego, i.e. the personification of the powers of imagination, desire, and anger. But in his *Treatise on Love*, he said that in proper interaction of the rational and animal souls the intellect raised the faculty of anger to battle with the heroes or to fight to drive the enemy from the virtuous city or the pious nation.[44]

Things were exactly the same with the other lowest forces of the soul: reason employed the external senses in order to deduce universals from individual objects, to put forward hypotheses by means of the imagination, to find the middle term of a syllogism, and to force the faculty of desire, in spite of its own goal, which was pleasure, to imitate the First Cause in preserving species, and especially the best of them, the human species, as it forced this faculty to strive for food and drink not just anyhow, but so as best to help nature, which was called upon to preserve the individual of the best species, i.e. the human individual.[45]

The Islamic Aristotelians developed their doctrine of the highest cognitive faculty of the human soul—noologia—from the psychological doctrine of Aristotle and his commentators. The immediate source was chapters 4 and 5 of Book III of Aristotle's *De anima*, in which it is asserted that the faculty of man's rational activity preceded the activity itself, being a *tabula rasa* on which only an act of thought imposed a certain content, a phantasm, derived from sense images. In that connection Aristotle differentiated a dual intellect: active, which produced everything, and passive, which could become everything. In introducing the concept of passive intellect he was probably trying to establish some sort of link between thought and the activity of the lower, sense faculties of the soul, but the essence of this intellect and its relation to active intellect and the lower psychic faculties remained undisclosed by him. Many commentators were subsequently concerned to fill this gap in his doctrine, including Alexander of Aphrodisias, who first introduced the term 'material intellect' to designate the intellect that Aristotle called passive.

The Islamic Aristotelians' division of intellect into theoretical and practical faculties (theoretical and practical intellects) originated in Aristotle, too. The practical faculty was the principle of human body's movement that urged it to perform single, deliberate actions corresponding to certain intentions. Ideas of a moral content that became generally accepted or, in other words, dialectical premisses arose at the junction of practical and theoretical intellect. Practical intellect should predominate over lower faculties of the soul and at the same time be subordinated to theoretical intellect, which meant, on the ideological plane, a need to subordinate the moral norms sanctified by religion for the masses, and religion itself, to philosophy.

Practical reason differed from theoretical intellect as the proper, forbidden, and permitted (the main qualifications—without intermediaries—of human acts in Moslem law) differed from the necessary, impossible, and possible (the modalities): the former represented nondeclarative, the latter declarative statements. In other words, the practical faculty of the human soul developed moral principles that had no relation to truth and falsehood, while the theoretical developed knowledge aimed at comprehending the truth and avoiding the false. Hence it is understandable why a doctrine of 'double truth' did not and could not arise within such a conception.

While good was the end of practical intellect, truth was the goal of theoretical intelligence. Since the attainment of good should ideally be guided by truth and preceded by attainment of the latter, theoretical intellect should necessarily take precedence over the practical and guide it. At the same time practice was also at the sources of speculation, but it was then not moral and political but what the Islamic Aristotelians called by the general term 'the practical arts'. By that they understood crafts that ensured human existence itself, i.e. primarily productive practice. But, they taught, this practice dealt with experience not mediated by abstract reflection. The artisan, they considered, operated only with ideas (*ma'ani*), like those by which animals built dens and nests, oriented themselves to the situation around them, and protected themselves from dangers threatening them. But these same ideas, or general representations constituted the foundation and 'matter' of the mind's abstracting activity, ensuring a gradual transition from sensory knowledge to rational.

The theoretical faculty of the human soul differed from its estimative and imaginative ones by a capacity to operate with forms abstracted from matter. The point here was not one of abstraction from matter as a certain materiality but of the degree of abstraction from the properties and characteristics of individual objects. These forms were either abstract in themselves or still preserved connections with matter, i.e. with corporeal-individual being. In the first case they were simply accepted by the theoretical faculty, and in the latter were abstracted by it from said links. In that case the universal forms would be intelligible *in potentia*. But the word 'potentia' was used in three senses: (1) as the designation of a certain predisposition in general, for example, a child's ability to write; (2) to designate the same predisposition, but already with certain concrete characteristics—as matters stood with a lad who was acquainted with inks, pen, and the alphabet; (3) to designate a consummated predisposition, as when a skilled scribe did not write but was capable of demonstrating his art at will at any time. In accordance with those meanings of potentia, the *falasifa* differentiated a number of degrees in theoretical intellect variously called but on the whole designating roughly one and the same—the transition from 'privation' to 'possession', i.e. to consummated potentiality.

Kindi was the first in Islamic philosophy to speak about these degrees of theoretical intellect (as well as about 'actual', i.e. agent or active); he called the first degree 'potential intellect', and the second and third 'acquired intellect' (*intellectus adeptus*) (*al-'aql al-mustafad*). The highest degree of intelligence, which passed the potential stage of development, he called 'demonstrative', having in mind the same acquired intellect which actualised itself as the art of writing was revealed by the scribe in the course of his work.

When the relation of the theoretical faculty to abstract forms had a character of absolute or material potentiality, it was called 'material intellect' according to Ibn Sina, since it was similar in that state to primary matter predisposed to become the bearer of any form. When the relation to these forms had a character of potentiality approximating to actualisation, i.e. when there were first objects of intellection, viz. first premisses of the type of the axiomatic proposition 'the whole is greater than its parts', it was called *intellectus in habitu.* When this relation was characterised by what already had intelligible forms in the theoretical faculty that followed the first objects of intellection, and by its being able to contemplate them or not at will, it was called 'actual intellect'.

The theoretical faculty attained its highest degree when it actually contemplated and comprehended abstract forms, comprehending that which it comprehended. At this level it was called 'acquired intellect'. Its connection with matter, without which, however, any thought would be impossible in general, was only a hindrance at the level of acquired intellect because it was precisely that link that introduced an element of the subjective into thinking. Acquired intellect was thinking about thinking, the necessary character of which made it identical with the objective link of the things symbolised by active intellect. At the level of acquired intellect man was united with the universal Logos, i.e. with the law governing the world; nature, following the Logos, thus generated the creature in which and by specific means of which the Logos 'thought' itself. Acquired intellect, Ibn Sina wrote, crowned the genus of living creatures and the human species belonging to it; and in acquired intelligence the human potential already became similar to the first principles of all being.[46]

It is important to stress the Islamic Aristotelians' accentuating in their doctrine of theoretical intellect of the successive link of speculative thought with sensibility, of abstract thought's being prepared for and conditioned by sensual knowledge and experience. The link of 'intellectus in habitu' and 'material intelligence' contained a surmise not explicitly expressed conceptually, that axioms, or the first objects of intellection, were the product of age-long human experience and of the practical-cognitive activity of many generations.

This link was traced in particular by Ibn Rushd, who made a detailed critical analysis of two theses relating to the nature of material intelligence: (1) this intellect was a function of the body; (2) before it became actual it was something purely negative, like letters that had not yet been written on a slate. In opposing the first thesis, which he ascribed to Alexander of Aphrodisias, he said that if material intellect were a psychic faculty arising from a mixture of the four elements, intellect would not differ in any way from the senses, from which many absurd conclusions would follow. Intellect, having its own form, would be capable, for example, of perceiving only a limited range of uniform objects and would be unable to perceive opposites in one act of intellection, to perceive itself, and would also be subject over the years to 'wear and tear', although in fact it did not, in contrast to the senses, weaken with the passage of time, but on the contrary grew stronger, and so on. In short, Alexander of Aphrodisias, in this case, ignored the demand that Aristotle, following Anaxagoras, made on reason that, in order to cognise, it must not be 'mixed' with the body.

Ibn Rushd also raised objections to Alexander's reduction of material reason to simple disposition. To speak of a capacity to perceive intelligible forms as something purely negative without even a definite substratum, Ibn Rushd said, was equivalent to asserting absolute not-being that could not include any possibility. Following the analogy suggested by Alexander himself, he pointed out that material intellect differed from matter only in being everything comprehensible *in potentia* but not sensible and that, just as matter in itself contained the forms of individual things without acquiring them from any external source, so material intellect was not a predisposition to thought but was a bearer of this disposition, not that which had not been impressed on a *tabula rasa* but the *tabula* itself.

The real substratum of concepts awaiting transition from potentiality to the actual state, Ibn Rushd considered to be ideas (*ma'ani*) as positive entities worked out by the soul's imaginative faculty. The imaginative faculty, he stressed, was proper to a living creature

> which possesses many arts by nature, for its representations are not derived from the senses and seem to be perceptions intermediary between the intellectual and the sensible forms.[47]

Bees, for example, built their honeycombs by means of ideas or, according to him, imaginative forms; craftsmen like carpenters, too, were guided by ideas in their work.

Ibn Sina demonstrated the accidental character of the connection of intellect (the rational soul) with the body, and consequently its substantiality, by the following arguments.

(1) Intelligible objects must have a receptacle appropriate to them; this could only be reason; while the function of the receptacle was that of substance.

(2) The faculties that perceived through the intermediary of bodily organs weakened with intensity of perception; but things were the opposite with the rational faculty; consequently intellect perceived intelligibles exclusively through its own essence, without requiring any organs whatever.

(3) The body passively perceived objects affecting it; the intellect, on the contrary, was capable of passing from one perception to another, which meant it was active and had no need of anything external.

(4) The body and its own faculties weakened with aging; with the onset of old age the intellect, on the contrary, grew stronger; consequently it was a substance that did not depend in its being on the body.

(5) The bodily faculties were incapable of endless activity; the rational soul was capable of such activity since it could think of infinite concepts in mathematics and metaphysics.

Another argument, known as the 'hovering man', was based on introspection. The reader was asked to imagine himself, only just created in completed form, but lacking the possibility of perceiving anything visible, hovering in the air or in airless space, so that his members did not touch one another, and in general not feeling anything inside or outside himself. In such a state, Ibn Sina said, you would be aware only of your existence, and that directly, so that if you managed to imagine a hand or some other part of your body, you would not perceive it as a condition of existence of your Ego, i.e. of your own soul. Which meant that its link with the body was accidental.

Ibn Sina's argumentation leads us from the nature of self-knowledge to the substantiality of the soul, from the nature of abstraction to its immateriality, and from the substantiality and immateriality of the soul to a conclusion that this rational soul retains its being irrespective of the existence or non-existence of its connection with the flesh. This property of the human soul was called 'imperishability' by both Ibn Sina and the other Islamic Aristotelians, which seemingly corresponded to the religious dogma of immortality. But what was the real essence of the 'immortality' of the soul for them?

THE PROBLEM OF IMMORTALITY

The *falasifa* made no secret of their conviction of the impossibility of bodily resurrection, although they also tried not to stress this idea, and set out their criticism of the opposite view in a veiled form. Ibn Sina, for example, adduced arguments against doctrines of metempsychosis, which was a quite pious thing to do, from the standpoint of righteous Moslems, that reinforced the dogmas of Mohammed's religion. Unexpectedly, these arguments were turned against Islam: the dead were turned to dust, which was then converted into plants, and these were assimilated by the organism of another man, so that during the resurrection of the flesh in the next world two or more souls would be in one and the same body (even more convincing was another example cited by Ibn Sina, of a cannibal and his victim).

In addition to physical arguments against the possibility of resurrection of the body such as those cited above, Ibn Sina advanced metaphysical arguments based, for example, on the impossibility of the existence of infinite matter, which would require an infinite number of souls for resurrection, or the impossibility of restoring that which had passed into not-being, in particular restoration of past time. The last argument is of interest because it refuted the Mu'tazilite interpretation of resurrection according to which a thing turned into a not-existent nevertheless continued to remain the same thing, so that, if existence again came to it as its state, it became self-identically existent. Ibn Sina pointed out that a thing that existed in the past would have the time (*al-waqt*) during which it existed as its property, and so, if it once more began to exist self-identically, the past time would also have to get a second existence, in which case the difference between past and present would be wiped out. From the standpoint of Ibn Sina himself restoration of the being of a thing meant generation of a copy of it.

It was just as stupid, according to the *falasifa*, to suppose the possibility of immortality of the animal part of the soul (not to mention the vegetable part, which performed purely natural functions). Its perishability, according to Ibn Rushd, was obvious even from the fact that if, say, the capacity of sensation were intransient, it would eternally contain images of sense perception and these would not need external objects for their perception. In the same way the internal perceptive faculties were perishable, and also love, anger, and the other emotional states of the soul.

And then there remained only intellect as a faculty capable of existing independently of the body and experiencing inexpressible bliss in the 'afterworld' (*al-akhira*).

As we have mentioned above, satisfaction, and the emotional states opposite to it, were directly connected with the body, according to the *falasifa*, and with changes that occurred in the *pneuma*, that filled the heart. Their arguments about the pleasures that the human soul was destined to experience in the 'other world' had no relation, of course, to life beyond the grave, since they recognised only 'immortality of the soul'. These pleasures were wholly this-worldly, and their source was science, in particular philosophy, and in philosophy the clarification and elucidation of difficult problems. Mental bliss of that kind was not stipulated in the Koran and the other sacred texts that told of the joys of paradise.

The thesis of the 'immortality' of the rational soul stemmed from the fundamental difference between intellect and the faculty of sense perception. In contrast to sensation these concepts were transitory on the one hand, Ibn Rushd said, and on the other hand not. They were transitory insofar as they were an individual's concepts and intransitory insofar as they were common for all individuals embraced by the species 'man'. If concepts were only transitory they would be individual the same as sense perceptions but, in that case, people would not be able to pass knowledge on to one another. That is why 'the sciences are eternal'; the entity apprehended by the intellect 'must be ingenerable and incorruptible', and the sciences are 'not corruptible except by accident', because if 'they were transitory in themselves their connexion' with individual transitory things 'would exist in their essence and they could not always constitute an identity'.[48] Those mental forms present in the rational part of the soul were consequently eternal. But they could not exist independently, because otherwise independent being of universals would have to be assumed, i.e. it would be necessary to agree with a thesis that all the Islamic Aristotelians unanimously opposed. Consequently it was a matter here of an ordinary metaphore, or rather of a symbol, that admitted of a variety of interpretations depending on the reader's ideological orientation.

Concepts linked with Islam's eschatological doctrine were first given a symbolical, allegorical interpretation among the *falasifa* by Kindi in his treatise *Definitions and Descriptions of Things*. Their attitude to it was expressed most fully and frankly by Farabi.

In the introductory part of his allegorical work devoted to the problem of the esoteric and exoteric works of the Moslem thinkers who preceded him, Ibn Tufayl said, as regards the content of these and other works of Farabi's, that the latter had shown, in *The Virtuous Religion*, that evil souls were doomed to eternal torment after death, and that in his *Politics* he had declared that they disappeared and were turned into nothing, and immortal being was ordained in advance only for virtuous and perfect souls; while in his commentary on the *Ethics*, Farabi had, when speaking of how matters stood with human happiness, characterised it as what happened in this life only and continued that argument with words whose sense boiled down to all the rest being the nonsense and tales of old women.[49]

The point was that Farabi's commentary on the *Nicomachean Ethics* was one of his esoteric works, while the rest of those mentioned above were among the exoteric. In the *Politics*, for example, he said of the virtuous soul: 'Having been thus freed from matter, it is not destroyed by the destruction of matter, since it is no longer in need of matter in order to exercise its power or to exist'.[50] Quite another fate was ordained for sinful, unvirtuous individuals:

> The souls of such individuals remain chained to matter and do not reach that perfection by which they can separate from matter, so that when the matter ceases to exist they too will cease to exist.[51]

A philosophical interpretation of these statements was only realisable when the reader was familiar with Farabi's other works in which he explained how he himself understood 'the detachment of the soul from the body'.

And he understood it as follows: the detachment of the soul from the body was not detachment in place nor detachment by idea (*bi-l-ma 'na*), nor such a detachment as when the body died and the soul continued to exist, nor as when the soul perished but the soulless body continued to exist. 'Detachment' of the soul meant that in its being it did not need its body to matter for it (because the matter for the rational soul was ideas), and in the activity performed it did not need an organ that was the body or some force or faculty in the body. It was not detached while it had need of anything of that (since only the soul peculiar to man, i.e. theoretical intelligence, could be detached). For when theoretical intelligence was in such a state it became detached from the body; whether this body lived feeding and sensing, or the faculty by which it fed and sensed was inactive. In fact, when the soul had no need either of sense perception or imagination while performing its action, it was transferred to the other life (*al-hayat al-akhira*).[52]

The soul's 'detachment' or 'separation' from the body and its 'other-worldly' life consequently meant, for Islamic Aristotelians, that the theoretical intelligence inherent in man thought in abstractions, detached in all respects from corporeality, namely from sensations and notions mediated by bodily organs and having to do with the particular.

Furthermore, insofar as abstractions, unlike sensations, imaginative forms, etc., did not depend in their being on time, and to the extent that they adequately reflected the order of things, man was 'united' with active intellect at the level of 'acquired intellect' (for the subject and the object of intellection were identical in the act of intellection), and his soul became 'eternal' by attaining truths not subordinated to time. Man's maximum perfection and his intellectual happiness consisted precisely in that, according to the *falasifa*, from which it followed that souls that had not attained theoretical (dianoetic) virtues and, all the more, 'evil' souls, i.e. ones lacking civic (ethical) virtues, were doomed to 'torment' and 'death' because not-being (according to the *falasifa*) was evil in its pure form.

The Islamic Aristotelians, who affirmed the necessity of religion for the 'multitude', could not, however, reconcile themselves to the premisses of a moral character on which popular views of retribution in the other world were based. It was a matter of the contradiction between the demands made on man by religious morality so that his voluntary acts guided by it would be good, and the motives by which he should be guided, according to this morality, when performing them. From the angle of the 'generally accepted' religious dogma people should reject the joys and good things of earthly life and sacrifice themselves so as to be rewarded a hundredfold in the afterlife for what they had foregone in the earthly, human world.

From the standpoint of philosophy, Farabi in particular wrote, the good was always an end in itself. Courage, for example, ceased to serve a good end and was turned from a virtue into a sin, if a person risked his life solely in the hope of receiving a reward in paradise after death more satisfactory than that which would be his lot in this life if he remained alive. The virtuous man, Farabi said, should not hasten his own death. On the contrary, he should strive to live as long as possible so as to perform more deeds yielding happiness, and so that the inhabitants of the city would not be deprived of the benefit he could bring through his virtue. He should seek death only when the inhabitants of the city could gain more benefit from his death than he would bring them by continuing to live. A real hero and a truly virtuous man saw his supreme civic happiness in such a death, in a death directed to the good of fellow-citizens, and not to attaining bliss in paradise.

As for people who claimed true happiness to be attainable only after death, in the realm beyond the grave, Farabi drew a simple logical conclusion from their arguments, viz. that they should put an end to their lives and kill all people.

Farabi's critique of 'generally accepted' notions of the retributions of afterlife, and of their moral implications was developed further by Ibn Sina, in whose *Treatise of the Bird* (*Risalat at-tayr*) the narrative begins by asking whether there was anyone among his brethren who would give him his attention and to whom he could impart even a mite of his woes? Perhaps the brother would share his burden with him out of friendship; for the friendship of a friend when unadulterated by selfishness preserved its purity in joy and in sorrow. He wondered if he could discover a friend so pure and true if times set in such that friendship was equivalent to a business deal; but how would necessity work so that nobility would no longer know a friend?[53]

The symbolism of this prologue to an allegorical story-treatise is revealed in Ibn Sina's *Directives and Remarks (Kitab al-isharat wa-t-tanbihat)*. The 'friend' is God; the people who have converted faith into a matter of commerce are the so-called 'pious' (*'ubbad*) and 'ascetics' (*zuhhad*); the 'pious' were the believers who constituted the majority of the 'multitude' or 'masses', and whose faith rested exclusively on a hope of receiving an appropriate reward for it in the next world; the 'ascetics' were those who rejected worldly goods and sensual pleasures, not for the sake of some elevated end but for the satisfaction they received in abstainism itself. To both Ibn Sina opposed 'gnostics' (*arifun*) who strove to attain the Truth, i.e. God, without being prompted to it by any external or self-seeking considerations. In his opinion, the last type of people represented the category of believers closest to the philosophical ideal of the man who strove to know the Truth as an end in itself. He therefore called gnostics 'brothers in truth' in the *Treatise of the Birds*—their pantheistic world outlook occupied roughly the same position in relation to philosophy as the 'virtuous religion' in relation to the true philosophy in Farabi's doctrine.

Unlike Farabi and Ibn Sina, Ibn Rushd did not believe in the possibility either of governing a state through some 'true religion' or of drawing any sort of analogy between the cognitive ideals of the philosopher and the mystic. He favoured a clear delimitation of the spheres of scientific knowledge and religious beliefs. He considered it impermissible even to disseminate notions of a purely spiritual resurrection among the 'multitude', because the hopes and fears that the 'multitude' usually linked with the Day of Judgment were prompted more by bodily than by spiritual, abstract images. But like Farabi, he considered the 'generally accepted' notions of retributions in the next world to be quite immoral from the philosophical standpoint.

When commenting on Plato's *Republic*, Ibn Rushd wrote that these popular notions inspired no more than a pseudovirtue in believers since a person convinced of their truth refrained from certain joys and pleasures of earthly life only so as to receive them multiplied in the realm of the other life. The philosophical interpretation of the immortality of the soul consisted in affirming that knowledge was imperishable and immortal.

When one turns to Farabi, one can find the following argument in his *Virtuous City* (in the chapter on the uniting of souls with one another).

When one generation of people died, their bodies were annihilated, but their souls, liberated from the body, achieved happiness; other people of the same level followed them, took their places, and did what they had done. When these people, too, died, their souls attained the same degree of happiness as their predecessors, and each of them was united with its like by species, quantity, and quality. Since they were incorporeal their union did not at all events cause any mutual spatial restraint; that was because they did not occupy any place at all, and because the way they met and united with one another was not the same as what happened with bodies.[54] The more that identical souls separated from matter multiplied, the more the pleasure of each of these ideal entities grew.

That it was a matter here of theoretical happiness is clear from the analogy drawn by Farabi between these souls and the states of the scribe. The rational faculty of each of the uniting souls, he said, grew both qualitatively and quantitatively, and the quantitative growth was like the increase in a scribe's skill in the art of writing through his long exercise of his craft. The joining together during growth of the faculty of each of them had the same place here as the sequence of the scribe's actions which made his art ever stronger and more perfect. Since souls united with one another to infinity, the faculties and pleasures of each soul grew without limit in the course of time.[55] The image of the scribe who actually employed his art had symbolised theoretical intellect in its actual state since the time of Kindi. Consequently it was a matter for Farabi, in the passages referred to, precisely of theoretical happiness, and, moreover, happiness experienced by both separate individuals and all thinking mankind in its historical development.

Farabi thus recognised both individual and generic immortality, i.e. as a successive process of people's being drawn to eternal truths. Two of these moments subsequently proved divergent: whereas Ibn Rushd stressed the idea of humanity's generic immortality in the progressive development of its knowledge, Ibn Sina admitted individual immortality in the indicated philosophical sense.

Ibn Rushd's point of view was wrongly associated in mediaeval Christian Europe with the standpoint of monopsychism. If he had in fact held that view, Thomas Aquinas and Albertus Magnus would have been right in reproaching him; could it be imagined that one and the same soul was simultaneously wise and reckless, delighted and distressed? For Ghazali put forward exactly the same arguments against the *falasifa*: 'The soul of Zaid is either identical with the soul of Amr or different from it; ... were they identical, their knowledge ... would be identical too'.[56] Ibn Rushd replied to that:

> [Ghazali's] argument ... says in short that the soul of Zaid is either identical with the soul of Amr or different from it; but that the soul of Zaid is not identical with the soul of Amr and that therefore it is different from it. But 'different' is an equivocal term, and 'identity' too is predicated of a number of things which are also called 'different'. The souls of Zaid and Amr are one in one sense and many in another; we might say, one in relation to their form, many in relation to their substratum.[57]

Clearly, it could not be a matter with Ibn Rushd of some 'universal' intellect as a self-existent substance. For him it was a matter only of the unity of mankind from the standpoint of its essential being. He spoke of the eternity of both the material intellect and the active intellect actualising it, the former signifying eternal mankind's eternal capacity for knowledge and the latter the existence of an eternal condition for realising this possibility. As to the idea of eternal humanity, it contained nothing new in comparison with Aristotle's corresponding conception, where he wrote, for example, in book two of *De generatione animalium* that although entities that existed in the sublunar world were transitory as individuals, eternity was possible in regard to the species embracing them, as a consequence of which a genus of people, animals, and plants always existed.

NOTES TO CHAPTER 8

[1] Ibn Sina. *An-Najat* (Cairo, 1912), pp. 100-101; cited after S.M. Afnan's paraphrase in *Avicenna, His life and works* (Allen & Unwin, London, 1958), p 208.

[2] Ibn Sina. *Op. cit.*, p. 102; cited after Afnan's paraphrase in *Op. cit.*, p 208.

[3] See: Al-Ghazali. *Maqasid al-Falasifa* (The Intentions of the Philosophers, p 190.

[4] Ibn Sina. *Op. cit.*, p. 105: cited after Afnan's paraphrase in *Op. cit.*, p 210.

[5] Cited after Afnan's paraphrase in *Op. cit.*, pp 210-211.

[6] Cited from S.M. Afnan. *Op. cit.*, p 217.

[7] See: Ibn Sina. *Op. cit.*, pp 107-108.

[8] *Ibid.*, p 108.

[9] See: Ibn Sina. *Risala fi-l-'ishq*. In: *Rasa'il ash-shaykh arra'is Abi 'Ali ibn 'Abd-Allah Ibn Sina fi asrar al-hikma al-mashriqiyya* (Brill, Leiden, 1889-1899), Vol. III, p 23.

[10] Ibid., p 24.

[11] See: Ibn Sina. *Tabi'iyyat-i Danishnama-i 'Ala'i*. Ed. Mishkat (Tehran, 1952), p 11.

[12] See: *Ibn Sina. Hayy ibn Yaqzan.* In: *Hayy ibn Yaczan li-Ibn Sina wa-Ibn Tufayl was-s-Suhrawardi* (Dar al-ma‘arif, Cairo, 1952), p 44.

[13] Giordano Bruno. *Cause, Principle and Unity.* Fourth Dialogue. (International Publishers, New York, 1964), p 128.

[14] Averroes. De Substantia Orbis. In: *Philosophy in the Middle Ages: the Christian, Islamic, and Jewish Traditions* (Harper & Row, New York, 1967), p 309.

[15] Ibn Rushd. *Tafsir ma ba‘d at-tabi‘at* (Imprimerie catholique, Beirut, 1938-52), Vol. III, p 1474.

[16] Simon van den Bergh. *Averroes' Tahafut al-Tahafut*, Vol. 1 (Luzak & Co., London, 1954), p 43.

[17] *Ibid.*, p 62.

[18] See: Ibn Sina. *Hayy ibn Yaqzan. Op. cit.*, p 43.

[19] Ibn Sina. *Risala fi-l-‘isq. Op. cit.*, pp 6-7.

[20] Ibn Sina. *Nayy ibn Yaqzan*, p 44.

[21] Bahmanyar. *Op. cit.*, Vol. III, p. 108.

[22] *Ibid.*

[23] S. van den Bergh. *Op. cit.*, p 358.

[24] *Ibid.*, p 332.

[25] *Ibid.*, p 358.

[26] *Ibid.*, p 343; *The Koran*, 39:42.

[27] *Ibid.*

[28] *Ibid.*

[29] *Ibid.*, pp 357-358.

[30] *Ibid.*, p 332.

[31] Ibn Bajja. Kitab an-nafs. (Al-majma‘ al-‘ilmi al-‘arabi, Damascus, 1960), p 57.

[32] *Ibid.* p 61.

[33] *Ibid.* p 60.

[34] *Ibid.*, p 314.

[35] Bahmanyar. *Op. cit.*, Vol. III, p 125.

[36] Ibn Bajja. *Op. cit.*, p 128.

[37] Bahmanyar. *Op. cit.*, p 127.

[38] *Ibid.*

[39] *Ibid.*, p 124.

[40] Ibn Sina. *An-Najat*, p 163.

[41] See: *Psychologie d'Ibn Sina (Avicenne) d'après son oeuvre Aš-Šifa* (Czechoslovak Academy of Sciences, Prague, 1956), pp 200-201.

[42] See: Ibn Bajja. *Op. cit.*, p 140.

[43] See: *Rasa'il Ibn Bajja al-ilahiyya*, p 108.

[44] See: Ibn Sina. *Risala fi-l-‘ishq*, p 13.

[45] *Ibid.*

[46] See: Ibn Sina. *An-Najat*, p 166.

[47] S. van den Bergh. *Op. cit.*, p 336.

[48] *Ibid.*, pp 344-346.

[49] Ibn Tufayl. Hayy ibn Yaqzan. In: *Hayy ibn Yaqzan li-Ibn Sina*, p 57.

[50] Al-Farabi. As-Siyasat al-madaniyya (Hyderabad, 1346 A.H.) The political regime. In: *Medieval Political Philosophy: a Sourcebook* (The Free Press of Glencoe, New York, 1963), p 38.

[51] *Ibid.*, p 39.

[52] See: Al-Farabi. *Fusul muntaza‘a* (Al-Matba‘a al-kathulikiya, Beirut, 1971), p 86.

[53] See: Ibn Sina. *Risalat at-tayr*. In: *Rasa'il ash-shaykh ar-ra 'is, Op cit.*, Vol. 1, p 42.
[54] See: Al-Farabi. *Kitab ara' ahl al-madina al-fadila* (Imprimerie catholique, Beirut, 1959), p 114.
[55] *Ibid.*
[56] See: S. van den Bergh. *Op. cit.*, p 15.
[57] *Ibid.*, pp 15-16.

9

Metaphysics

THE SUBJECT-MATTER OF METAPHYSICS

Metaphysics (the 'first philosophy', the 'divine science' or the 'absolute wisdom') studied what existed not to the extent to which certain quantitative characteristics (they were the subject of mathematics) or motion and rest (which constituted the subject of physics) were proper to it, but insofar as it was simply existent. The field of metaphysical arguments primarily embraced objects that were necessarily concomitants of being as such, some of which related to it as if they were its species (substance, quantity, quality), others as if they were things attendant on it (*awatid*)—for example, the single and the multiple, potential and actual, universal and particular, possible and necessary).

'As if' was used here because being was a super-category, a transcendental concept, i.e. more general than the ten highest genera of being. Existence was not genus, not a general idea, obtained through the mind's abstracting activity, but an idea given to us directly, 'initially' (*awwaliyyan*) in contemplation, by which alone apposition of categories to reality became possible. As such it could neither be defined nor described since it was impossible to find either genus or species difference for it, or anything better known than it itself.

Ibn Sina remarked, when describing the name of this science—'that which is after nature' (*ma ba'da-t-tabi'a*)—that the word 'nature' signified here not a force that was the beginning of movement and rest, but the totality of the thing that arose from corporeal matter, this force, and accidents,[1] while 'after' had been employed in relation to us, although this science, in itself, should have been called 'that which is before nature' (*ma qabla-t-tabi'a*), because the objects studied by it preceded nature in essence and universality.[2]

The ultimate aim of metaphysics was knowledge of the ultimate basis of being, of what the Greeks had called *arche* (beginning, principle). This word was translated into Arabic by the term *awwal*, which was employed to express the main senses of its Greek equivalent as presented by Aristotle in *Metaphysics*, i.e. epistemologically as 'the hypotheses of demonstrations',[3] ontologically as 'that thing as a result of whose presence something first comes into being'.[4] And when Farabi spoke of the first head of the city (*polis*), this 'first' was also a calque of *arche* signifying 'that in accordance with whose deliberate choice that which is moved is moved and that which is changed is changed; such as magistracies, authorities, monarchies and despotisms'.[5] Finally, the 'first philosophy' itself (*al-falsafa al-ula*) came to the Arabs from antiquity in order to designate the science that studied what 'is immutable', 'Being qua Being',[6] i.e. the 'first' in being.

The most essential characteristic of the 'first' in all its meanings was that it did not have the property in relation to which it was first. If it was the first in demonstration, then it was something believed without proof and not requiring demonstration. If it was the first in being, regarded as physical being, i.e. being existing in movement and rest, then it was something immovable. If it was the first in being as such, i.e. metaphysically, then it was not existent. If it was the first in the *polis*, i.e. in a socially organised and governed formation, then it was something that was not subordinate to anything else. If it was the first in respect of knowledge, then it was something such that knowledge of it was not drawn from something else but which itself supplied other forms of knowledge with principles, functioning as the 'science of sciences', the first wisdom. Such a 'first' resembled the unity which, according to Greek notions and the ideas of the Moslem Middle Ages, served as the beginning of numbers though not a number itself.

For Aristotle *nous*, as an irrespectively first lying outside cosmos, was independently existent: heavenly substances moved and were moved by themselves; *nous* as the final cause of their movement moved but was not itself moved. In that sense he called the cosmic intellect 'necessarily existent'.[7]

For Plato the truly existent and being were an idea (*eidos*), i.e. that which was thought in a thing, its intelligible essence. Being thus figured for him as a timeless aggregate of entities that, however, in view of their multiplicity and concreteness, necessitated a higher principle uniting them, in which quality 'good' or 'the one' functioned for him. But as the 'good' was something that was outside of the truly existent and intelligible (which were one and the same for Plato), then (as was indicated in Book VI of the *Republic*) it was outside essence, i.e. being.

That conception was developed in every way by the Neoplatonists. For Plotinus, in his *Enneads*, the One, which he identified with the Good, was superexistent, superessential, and therefore admitted only of intuitive, supermental experience. For Plotinus to exist meant to be susceptible of sensual or mental determinations. The Good lay beyond these determinations, so that it was not being but the parent of being.

Starting from this Graeco-Hellenistic tradition of the interpretation of *arche* (these conceptions existed in that tradition not only in pure form but also in a syncretic mixture both of each other and with conceptions of Stoicism, of the *Corpus Hermeticus* of the Areopagites, and of the Neopythagoreans), the Aristotelians of the Moslem Middle Ages, in striving to explain the world starting from itself, developed their doctrines of the first principle aimed at eliminating the theistic splitting of being into a transcendental Creator endowed with will and the world of His creations.

THE ETERNITY OF THE WORLD

For true followers of Aristotle the uncreatedness of the Universe was an axiomatic truth, but in the conditions of Moslem society it was necessary to substantiate this thesis without, however, rejecting the terms 'creator', 'creation', etc. but by giving them an allegorical meaning. For that they employed both the arguments of their teacher and Proclus' eighteen proofs, which they found in John Philoponus' book devoted to refuting them.

Among the Aristotelians of the Moslem East, Ibn Sina advanced arguments confirming this thesis. Thus, a thesis of the eternal existence of matter, and consequently of the world, followed from his argument that a thing must, before it arose, exist *in potentia*, and the possibility presupposed the pre-existence of the potential and its substratum. The same conclusion followed from his argument that a time of non-existence of a thing preceded its becoming, and time was inconceivable without movement.

In Moslem Spain Ibn Rushd devoted a considerable part of his *Incoherence of the Incoherence* to proofs of the eternity of the world, but this theme had been touched on before him by Ibn Tufayl in his *Hayy ibn Yaqzan.* His crusoe, having comprehended that the world was limited in space and was, as it were, a single living entity, asked whether the world arose after it had not been, or whether it had existed eternally. When he tried to imagine the eternity of the world his previous arguments about the impossibility of an infinite body of the world came to his mind; he now extended it to the infinite existence of the Universe in the past. But he had only to admit the origin of the world in time for other aporia arose. He saw that the concept of the origin of the world after not-being was conceivable only in the sense that time existed before it. But time comprised part of the whole world and was not separate from it; consequently the supposition of a later origin of the world than time was inconceivable. He argued as follows: since the world was created, there must inevitably have been a creator of it, but why did this creator create it precisely at that moment and not before? Did something new act on him that was prior to him? But nothing existed then except the creator. Or did some change or other occur in him himself? But then who was the creator of this change? He reflected about this continually for several years, and many proofs occurred to him, but no answer had final superiority over the others.[8]

During those years of profound thought and waverings, the hero of the story's choice fell upon a proof of the uncreatedness of the world based on a thesis of the 'co-eternity' of the prime mover and a world existing in change. This prime mover, or creator, was a principle not conjoined with a body but also not separate from it, that was not within it but was also not outside it, since combination, separation, being within and without all this belonged to the properties of bodies. It was taken from them.[9]

In the arguments for the uncreatedness of the world advanced by Ibn Rushd, three modes of argumentation can be distinguished; one based on proofs adduced to confirm this thesis of Aristotle's; another based on a symbolical-allegorical interpretation of the Koran; and a polemical mode employed to defend the doctrine of the preceding *falasifas* against Ghazali's criticism directed against Ibn Sina and other Islamic Aristotelians in the name of the Ash'arites.

The first mode of argumentation presents little interest since it repeats Aristotle's. It is characteristic of Ibn Rushd's commentaries on the works of Aristotle, especially on the *Physics*, the *On Coming into Being and Passing Away*, and the *Metaphysics*. The mode based on a metaphorical interpretation of the Scriptures, on the contrary, which was quite foreign to Ibn Rushd's apodeictic way of thinking, is interesting, however, in that it is a model of the practical application of the method of such interpretation to solution of this very important philosophical question. We find this method of proof in *The Decisive Treatise*, in which, from verses of the Koran referring to the creation of the world, it is affirmed that it was a matter in them only of a change of form of the universe whose being was infinite both in the past and in the future. According to Ibn Rushd the words of the Koran

> He it is Who created
> The heavens and the earth
> In six Days—and His Throne
> Was over the Waters[10]

implied 'that there was a being before this being'[11] i.e. indicated an existence of the Universe without beginning, while the words

> One day the Earth will be
> Changed to a different Earth[12]

supposed 'that there will be a second being after this being'[13].

The 'insubstantiality' of such a proof of the eternity and perpetuity of the Universe was so obvious, however, that Ibn Rushd did not even try to use it in his polemical *Incoherence of the Incoherence.* In it we find the third mode of argumentation, which presents the greatest interest for the history of philosophy. The sections devoted to discussion of it take up a good quarter of this fundamental work, which in itself makes it possible to set out its polemic in a very simplified and schematic form.

The discussion between the authors of the two *Incoherences* included the arguments of the Islamic Aristotelians, the counter-arguments of the Ash'arites, for whom Ghazali spoke, and the arguments of Ibn Rushd who disputed the arguments of the latter. The dispute was waged around the four proofs of the eternity of the world considered by Ghazali in his *Incoherence of the Philosophers.*

> *The first proof*: The philosophers say: it is impossible that the temporal should proceed from the absolutely Eternal. For it is clear—if we assume the Eternal existing without, for instance, the world proceeding from Him, then, at a certain moment, the world beginning to proceed from Him—that it did not proceed before, but there was no determining principle for its existence, but its existence was pure possibility. When the world begins in time, a new determinant either does or does not arise. If it does not, the world will stay in the same state of pure possibility as before; if a new determinant does arise, the same question can be asked about this new determinant, why it determines now, and not before, and either we shall have an infinite regress or we shall arrive at a principle determining eternally.[14]

Ghazali advanced two objections to this proof.

The first objection was to say: why do you deny the theory of those who say that the world has been created by an eternal will which has decreed its existence in the time in which it exists?[15] From the standpoint of the *mutakallims*, the philosophers pretended that in that case they based themselves on a certain axiom, although in actual fact there was none because otherwise it would have enjoyed general consent. But people who believed in the createdness of the world in time were countless. On the other hand the philosophers quite illegitimately compared God's eternal will with the finite will of people, for whom the coming into being of the object of desire could not lag behind the appearance of the desire itself. Secondly, the philosophers were obliged to admit the creation of the world in time since they admitted the existence of causal relations in it, which could not form an infinite regress.

Ibn Rushd, rejecting in passing Ghazali's reference to the accepted dogma of the createdness of the world by an eternal will, remarked that the truth of a thesis did not consist in its recognition by all people. As for the essence of Ghazali's objections, the first had a purely sophistical character; since Ghazali could not affirm the possibility of the actual effect being delayed after the willing agent's act and decision to act, 'he regards it as possible that the effect should be delayed after the will of the agents'.[16] But the point lay in the impossibility of delaying the effect after the agent's act. The main fault of the argument was that the will which religion ascribed to God was judged by analogy with the will of man. Ghazali's second objection ignored the fact that everything which had a beginning in time stemmed from the movement of the celestial spheres, but not because that movement was constant, but since it was renewed.

The second proof. The philosophers asserted that by God's priority to the world must be understood His essential and not temporary priority, because it would prove otherwise that a time which had an end but no beginning would have passed before the world and the time associated with its movement, which was impossible. If time, which expressed the measure of motion were eternal, eternity must be peculiar to what moved, namely the world. Finally, eternity of the world also followed from the truth, indubitable from the standpoint of theologians, that God was capable of creating the world an infinite number of years before he allegedly did so, since denying that truth would be equivalent to denying the omnipotence of the Creator.[17]

Ghazali objected to that as follows: God's priority to the world and time should be understood in the sense that time was created, and that God existed at first without the world and time, but later with the world and time. The supposition of time together with God and the not yet created world was a mistake of human imagination, powerless to imagine the beginning of something that was not preceded by something 'before', i.e. time.[18] The imagination had exactly the same illusion when it supposed a void beyond the world, although that was inconceivable since extension was a necessary attribute of a body.[19] The philosophers' last argument gave rise to a similar error of the imagination, which could readily be refuted by comparing time and place; we may ask whether God was not able to create the sphere of the world smaller or larger than he has created by a cubit or two cubits' and so on *ad infinitum*. And if the philosophers said He could not, they thereby denied His omnipotence; if they said 'yes' they ascribed magnitude to the void, but that was absurd since a void was nothing.[20]

Ibn Rushd first stressed the pointlessness of the whole dispute about the prior and the posterior, since it was not peculiar to the eternal to be in time, but it was peculiar to the world. The philosophers were not embarrassed by this for they considered that the moving world as a whole had no beginning, and could 'indicate in what way the temporal things proceed from the eternal'.[21] As for the comparison of time and place, it was flimsy because time and movement, unlike a body, did not have position and did not form a whole.

The third proof. The philosophers insisted that if the world were eternally possible, it consequently existed eternally, because it would never be impossible in that case; if it were supposed that the possibility of its existence had a beginning, then it would lead to admission 'of a time when the world was not possible and God had no power over it',[22] which in turn would be identical to converting the impossible into the possible.

Ghazali admitted the hypothetical possibility of the world's originating at any moment of time elapsed before this; at the same time he pointed out that the world had not started at any time; since the actuality did not coincide with the possibility. Similarly there was no limit to the possibilities of and addition of some body to the existing world, and then another body, and so on *ad infinitum*, which however did not presuppose the existence of an absolutely filled infinite space.[23]

Ibn Rushd adduced the difference between the claims of those who deduced the eternity of the world from the only one possibility of its coming into being, and Ghazali's assertion of an infinite number of possible worlds, the assumption of which would convert them into individual bodies, which led to an absurd conclusion that 'this world would be part of another world, a world individually eternal or we have an infinite series. And if we have to bring this series to a standstill, it is more appropriate to arrest it at this world, by regarding it as eternally unique'.[24]

The fourth proof. The philosophers considered that the existence of each thing that becomes must, before its becoming, either be possible, impossible, or necessary; it cannot be impossible, for the essentially impossible will never exist; it cannot be necessary, for the essentially necessary will never be in a state of non-existence, and therefore it is the essentially possible.[25]

Since there is no other substratum apart from matter with which this possibility could be connected, it follows from it that primary matter had never come into being.

Ghazali parried this argument of the' philosophers by saying

> that the possibility of which they speak is a judgement of the intellect, and anything whose existence the intellect supposes provided no obstacle presents itself to the supposition, we call it possible and, if there is such an obstacle, we call it impossible and, if we suppose that it cannot be supposed, we call it necessary. These are rational judgements which need no real existent which they might qualify. There are three proofs of this. The first is: If possibility needed an existence to which it could be related, and of which it could be said that it is its possibility, impossibility also would need an existent of which it might be said that it is *its* impossibility; but impossibility has no real existence, and there is no matter in which it occurs and to which it could be related.[26]

Ibn Rushd exposed the unsoundness of Ghazali's reasoning in which he tried, by means of nominalist arguments to refute the arguments of the philosopher for the eternity of matter that he had adduced.

> This argument (Ibn Rushd wrote) is sophistical because possibility is a universal which has individuals outside the mind

> like all the other universals, and knowledge is not knowledge of the universal concept, but it is a knowledge of individuals in a universal way which the mind attains in the case of the individuals, when it abstracts from them one common nature which is distributed among the different matters.[27]

What was said about the nature of possibility was also just in relation to all other true concepts since the true, by definition, was that which existed in the soul just as it existed outside the soul. Ghazali's reference to the absurdity of endowing with impossibility some sort of substratum was therefore also unsound.

In the concluding part of this polemic Ibn Rushd demonstrated in a similar way, the infinity of the existence of the world in the future. The basis of his argument was the thesis of the Islamic Aristotelians that everything that had a beginning had an end, and everything without a beginning was infinite.

Ghazali had affirmed in his *Incoherence of the Philosophers* that the assumption of an infinite series of natural causal connections following from the *falasifa's* arguments made the postulating of a first cause superfluous, i. e. led directly to atheism. But the Islamic Aristotelians did not deny this by their arguments about the existence of a first cause. On the contrary, proof of the eternity of the world for them was the start of searches for a first principle that explained the vital activity of the Universe as a single living entity. And these quests were connected with examination of objects concomitant with the existent as such, and with a structuring of being (*secundum prius et posterius*). We find a systematic examination of these objects only in Ibn Sina and his successors.

THE STRUCTURE OF BEING *SECUNDUM PRIUS ET POSTERIUS*

Ibn Sina and his successors treated the structure of the existent from the angle of the prior and the posterior. Priority and posteriority were differentiated according to order, nature, worth, time, essence, and causality. Priority by worth and time needed no explanation. Examples of the prior and posterior by order were Kufa and Baghdad or the body (as genus), the animal (as an intermediate class of bodies), and man (as species); depending on the 'point of reference' their succession could be such as they were called, and opposite. Examples of priority by nature could be one and two—with elimination of the former the latter was also eliminated, but with elimination of the latter the former was not eliminated. Priority by essence we had when the being of one thing did not depend on the being of another, but the being of this other depended on the being of the first, although the two existed at one and the same time. As for priority in causality, it was dual: it was either priority of an essential cause, or of an accidental cause, to its effect.

The causal connection formed by accidental causes was characterised by the causes in it preceding their effects in time; and it itself could form an infinite regress. The causal connection formed by essential causes, however, was characterised by the simultaneous existence of the causes and their effects; and it could form an endless series. If essential causes formed an endless series, one of two things followed: either there would not be a cause among them that did not have its own cause, or there would be one such cause. If there was not an uncaused cause among them, there would be an actually endless number of effects. But the aggregate of the effects would have a cause outside itself. If this cause had its own cause it would be an effect, and that meant it would be part of the totality of effects, but it was assumed that it lay outside the aggregate. Consequently this cause had no cause of its own, and the chain of causal relations was completed precisely with it.

From the standpoint of the relation of the existent to this uncaused cause, i. e. to its first principle, the question arose first of all whether this principle was prior to the existent in time. The eternity of the world, i. e. the thesis that a given principle did not precede the existent in time, was proved from the subordination of the supposed activity of the first principle to universal laws that confirmed absolute and universal determinism.

The last point was demonstrated by examination of two pairs of metaphysical concepts, i. e. those of cause and effect and those of the potential and the actual.

When Ibn Sina and his successors argued about the four Aristotelian causes, they divided the material and formal causes into two types, so that causes could be either matter for the compound, or form for the compound, or substratum for accidents, or form for primary matter, or agent and aim.[28] The relation of cause and effect was defined as the relation of what existed, irrespective of anything, and that whose existence stemmed from something. Cause and effect had a variety of connections between them, and they were primarily characterised by whether or not the cause was part of the effect it evoked. When it was part of the effect one of two things followed: the relation between the cause and the effect would be either a relation between the primary matter and a compound object, or a relation between form and a compound object. In the first case the effect would be potential and in the second actual. When the cause was not part of the effect it evoked, there were again two possibilities: either it was combined with the effect or it was not. In the first case the relation would be either one of form and primary matter or a relation of substratum and one of the accidents. In the second case the cause would be either efficient or final. If the action was directed to achieving a certain aim, the latter ideally preceded the action (like the form of health in the soul of a physician, functioning as the chief agent and the chief moving force. The efficient cause acted either by nature (like fire, when it burned something) or by will (like a man when he moved something), or accidentally (like hot water when it scalded, since that did not happen from the nature of water but by virtue of its happening to be hot at that moment).

Every effect had its cause, and every cause, when there were the appropriate conditions, of necessity entailed an effect corresponding to it. Miracles, i.e. infringements of natural order did not exist. The case when the appropriate effect did not follow from some cause was explained by the presence or absence of certain conditions, for example absence of the necessary matter. If the essence of an object remained unaltered when the external conditions were unchanged, it was incapable of becoming the cause of the origin of something else, since that called for the appearance of some new state either in the object itself or in the external conditions. The rise of something without appropriate changes in the causes and conditions would therefore be a miracle, just like origin without cause.

But everything that came into being must, before it actually existed, possess potential being, which (as we recall) revealed its reality through actualisation of the object, namely by its disappearance. Potency was not substance but a state of substance, and a substance in which there was this state was matter. Matter always preceded the being and origin of a thing it needed when in the potential state.

Ibn Sina drew a distinction between active potentiality, i.e. capacity to act, and passive potentiality expressed in a disposition to receive something. When active potentiality (whether linked with the nature of an object or with the will of a living creature) was united with passive potentiality, and both had attained completion, then action and a suffering of action stemmed of necessity from their union, i.e. the potential became actual.

The determinist positions examined above in the proof of the eternity of the world, were also extended to the supposed activity of God, as we saw in the preceding section. The eternity of the world, when the presence of a first principle was assumed in it, was proved by a dual interpretation of the terms 'eternal' and 'created' employed by Ibn Sina and other *falasifa* to maintain the formal link of their conception of a first principle with religious dogma.

'Eternal' was said of something, either in respect of essence or in relation to time. The eternal in respect of essence was that for whose essence there was no principle of which its existence depended, and the eternal in regard to time was that whose time had no beginning.[29] Things were exactly the same with 'created'. In one meaning it was that for whose essence there was a certain principle on which its existence depended, and in the other meaning that whose time had a beginning.[30]

The proof of the eternity of the world followed, for Ibn Sina and his successors, from a conviction that determinism was universal and 'indivisible'; scientific rigour did not permit of any exceptions, so that if a breach of the principle of the determinism were admitted in respect of being in time, the principle would have to be abandoned altogether. Ibn Sina recognised the 'createdness' of the world, interpreting the word as signifying that the phenomenal world given to us in our finite experience could be and could not be to the extent that the objects and processes we observed (which in their aggregate formed this phenomenal world whose metaphysical status was expressed by the term 'possible being') could be and could not be.

The world as 'possible being' could not be adequate ground for asserting the necessary character of each individual phenomenon. Consequently, in order for physics to be given a reliable foundation, it was necessary to find a principle thanks to which one could always be confident that the causal connection traced did not form an infinite regress but stemmed from a general pattern of being that always and everywhere had incontestable, necessary force. That principle, of course, had to be outside possible being; but if it were only transcendent to the world, it would have its embodiment in the God of traditional religion, and one would have to agree that each object and phenomenon in the world was generated, not by natural causes, but by continuous creation, by a creative act of a definite creator endowed with will. So that principle had to be outside the world and at the same time not outside it.

Ibn Sina came to just such a conclusion as a result of quests whose starting points were arguments like the following. True knowledge of a possible existent (he said) was knowledge of causes by which it existed or did not exist, i.e. knowledge of it from the angle of necessity. Thus if one said that so-and-so would find a treasure tomorrow, that would be a statement about the possible and not of the impossible since it was not known whether this man would or would not find a treasure. If there were no knowledge that he intended, for some reason, to take such-and-such a road, that for some other reason he chose such-and-such a direction, and that again for some reason he would find himself in such-and-such a place, and if, moreover, it was known that there was a cache in that place and that its planking would not support this man's weight, then the statement concerned would be an expression about necessity and not possibility. Consequently, Ibn Sina argued, every thing had a cause, but the causes of things were not fully known to us. So their necessity was also unknown to us; and if we knew some causes only, that would arouse doubt and not certainty, because we knew that the causes we were acquainted with did not make a thing's existence necessary. There might be some other cause, or an obstacle would be encountered. If there were no 'maybe', we would know for certain.[31]

When Ibn Sina was tackling the problem he set himself, he postulated the existence of a concrete object, divided it into its component elements by the Aristotelians' traditional method, and considered how far its existence depended on one or other of these elements and where to look for the real basis of its necessary being. The elements were investigated in this divided form, since, if they were separate entities, though in reality outside the knowing subject, he stressed, they formed an undivided unity that could only be isolated in the mind. A concrete existent was treated primarily from the standpoint of the highest genera of being, i. e. substance and accidents. As to the first and the other nine categories, he said, 'being' was predicated to them not univocally (*bi-t-tawatu'*) but by analogy (*bi-t-tashkik*), because substance, by definition, did not exist in the substratum, while accidents were in it and, consequently, required something for their being that substance did not require. But 'being' was also expressed dissimilarly in respect of the different categories of accidents, because there was no need, in order to represent some accidents, to examine anything other than their substance, but in order to represent others it was necessary to consider something else apart from their substance. The first accidents included quality and quantity, the second the remaining accidents.

But a body was a composite substance in which one could mentally distinguish form and matter, which figured as its receptacle. The being of the receptacle, in the broad sense of the word, either did, or did not, depend on what was 'contained' in it; in the latter case it functioned as substratum, and in the former as primary matter. Substance did not reside in the substratum, but would be in the receptacle, i.e. could be primary matter. In the latter case it would be material form, and in the former would or would not be a non-composite receptacle. If substance were such a receptacle it would be primary matter; if not, it would be either a body consisting of matter and corporeal form or a form isolated from matter, i.e. intellect or soul. Consequently, form, primary matter, body, intellect, and soul were included in the category of substance in the ontology of Ibn Sina and his successors.

And then the question arose of what the role each of these substances had in the existence of a concrete object taken separately.

Primary matter in itself was something non-existent since it was only a simple potency of existence. Potency preceded a thing's actual existence in a certain sense, but that was priority of the non-existent to the existent, so that it was secondary in being in relation to the principle that transferred the object from the potential state to the actual. This actualising principle, of course, was form, which made the object precisely what it was. Form, or the quiddity of an object, was universal, since it was a conceptually identical element of individual objects of a certain class; then the question arose again whether a universal was self-sufficient in its being. The Islamic Aristotelians, including Ibn Sina, raised that question in both logic and metaphysics.

When treating this matter in his *Book of Salvation*, Ibn Sina wrote that the 'universal' is said of 'humanness' in an unconditional way in some cases, and in others on condition that 'humanness' was predicated of many by some known or other (i.e. as genus, species, or species difference). In the first meaning the universal had actual being in things, and was predicated of each of them, but not so as to be single in itself, and not so as to be many, because that was not characteristic in it as 'humanness'. As for the second meaning, it was dual: (1) it was the meaning of potentia in being; (2) the meaning of potentia when it became correlated with a comprehensible form, perceivable from humanness.[32] Of these three meanings of the universal, or universals, the last was related to the idea of an object, represented in the human mind through its abstraction from the individual features of an actually existing object, the second to the idea of a potentially existing subject (for example, the idea of a house in a builder's mind), and the first to the idea as the essence of each single actually existing object.

Ibn Sina, like all the other Islamic Aristotelians, was an uncompromising opponent of realism of a Platonic type. It was habitual for people, he wrote, to say that all black things were one in their blackness, and that all people were one in their humanness.[33] Humanness and blackness could exist in the representation of the many outside the human mind as a self-sufficient essence. The absurdity of this notion was revealed particularly clearly when people were reduced to asserting that there was single soul that was actually to be found in Zayd and Amr, just as there was one father for many sons or one sun for many cities.[34] But humanness and blackness did not have an independent existence as separate entities outside concrete objects and outside the human mind, because it could not be that one humanness, or one blackness could exist outside the soul, outside the imagination, and outside the intellect, and for it to be identically inherent in all human and all black. Otherwise this single humanness would possess wisdom, being Plato, and at the same time would be ignorant, being some other person. But of course, it cannot be that one and the same thing could simultaneously possess and not possess knowledge and be at once both black and white. It also cannot be that any animal could be at once an animal that runs and flies, does not run and does not fly, is a biped and a quadrupled.[35]

As for the universal as intelligible, Ibn Sina explained its origin in a person's intellect as follows. When he saw a certain object, it imprinted its species form in his soul; when he then saw another object of this same species, it did not imprint anything new on the soul compared with the form already imprinted there, as for example, when something appeared after Zayd that was not Amr but a lion, which was already a different form.[36]

Ibn Sina did not explain, however, how the subject of knowing singled out, before eliminating the individual features included in the representation obtained, those signs in it which would be retained as ones constituting the quiddity of the given species of objects. Clearly, he could only do so in the case when his soul disposed in advance of the universal form inherent in all objects of this species. But, according to Ibn Sina, this form only arose initially in a person with contemplation of the first individual object belonging to that species, which meant that species form of, say, a person, was no more than a certain remainder obtained through 'subtraction' from the notion of some Zayd of those of its elements that were peculiar to the individual but not to its genus or species. With such an interpretation of the forming of a concept or intelligible form of humanness, this form proved on close examination not to be universal, as Ibn Sina claimed, but individual. From that it was one step to a representative theory of abstraction in the spirit of Berkeley's idealist nominalism. And that step was taken hundreds of years before Berkeley precisely by Ghazali in the name of the Ash'arites.

One can be easily convinced of that by comparing Ibn Sina's argument above on the genesis of intelligible universals with the following arguments of Ghazali's:

> According to us nothing inheres in the intellect but what inheres in the senses, only it inheres in the senses as an aggregate which they cannot separate, whereas the intellect is able to do so... For there is in the intellect the form of the individual thing thought of which is first perceived by the senses, and the relation of this form to all the individuals of this genus which the senses perceive is one and the same. If, after seeing one man, someone sees another, no new form occurs to him as when he sees a horse after seeing a man, for then two different forms occur to him.[37]

Ghazali thus reacted sensitively to the weakness in Ibn Sina's argument about the formation of concepts, taking his ideas to their logical conclusion by the method of *ilzam*. Ibn Rushd refuted the nominalist conclusions drawn by Ghazali from that kind of argument, stressing (following Aristotle) the objectivity and unity of the individual and the universal.

At all events, Ibn Sina's aim in this context was to show that essence and form in being could not be more self-sufficing than primary matter which actually existed only in unity with form, i. e. as a body. A body as something that acquired being through the union of form and matter also could not be the cause of its own existence, conditioned by the actualisation of form, which meant that the cause of its existence lay outside these three substances (body, form and matter). But this cause, which translated forms from the potential state to the actual, was the forces that operated in the world by 'immutable laws' in correspondence with the universal intelligence and the cosmic intellects forming it. But the existence of these entities that determined the life of the Universe was also only possible, since it did not follow from their quiddities.

Then Ibn Sina turned to mental dissection of the concept of the existent itself, so going beyond the field embraced by the ten categories. The existent, he said, was either necessary or possible, or impossible (recall that these are not genera or species of the existent, because the existence is a transcendental concept). The necessary existent was such that assumption of its nonexistence led to absurdity, and the impossible existent was such that assumption of its existence led to absurdity. As for the possible existent, neither assumption of its existence nor assumption of its nonexistence led to absurdity, i. e. it could both be and not be.

The necessary existent could be either necessary-being-in-itself, or necessary-being-through-other (for example, four was necessary being since $2+2=4$, i. e. it was a necessary existent owing its necessity to two's being added to two). One and the same thing could not be simultaneously necessary existent in itself and necessary being through another, just as there could not be more than one necessary existent in itself. Ibn Sina deduced the existence of a necessary existent in itself from the impossibility of the existence of possible existent principles that functioned as the causes of the existence of the possible existent in itself.

If they existed all together, he wrote, and there was no necessary existent among them, then their aggregate as such (whether they are infinite or finite in number) would be either necessary existent of itself or possible existent. If it were necessary existent and each of the constituent causes was possible, then the necessary existent would be composed of possible existents, which would be absurd. If it were possible existent of itself, then, since the aggregate in being needed a principle endowing with existence, this principle would be either outside it or within it. If it were within it then one of these causes would be a necessary existent while each of them being a possible existent and a cause of the existence of the aggregate, or a possible existent, which would be absurd, or it would be a possible existent and cause of the aggregate. But then the cause of the aggregate would prove to function as the cause of the existence of its parts, one of which it itself was, and so it would prove to be the cause of its own existence. If that assumption were correct, then it would, in a certain sense, be just what it was required to prove, but it was absurd: anything that was self-sufficient in its existence would be a necessary existent, and would not be, which would be silly. Consequently this principle would exist outside the aggregate and could not be a possible cause, because all possible causes were assembled in the aggregate. Thus it would exist outside the aggregate of possible causes and be a necessary existent in itself.[38]

Summing up the arguments for the existence of necessary-existent-in-itself, and the discussion of its absolute unity, Ibn Sina said he had found that there was a necessary existent principle in the Universe that was not part of any genus, and was not subject to any definition or proof (because it was not itself, but its existence, that was subject to proof), lacked quantity, quality, quiddity, 'where', and 'when', and which had no equal, or associate, or opposite. It was one in the full sense, because it was not divisible into parts either actually or supposedly and estimatively (as happened with the continuum), or in the intellect, so that it itself was constituted of the ideas differing from one another that its aggregate united. It was one only in a negative sense.[39]

Essence and existence were identical in the necessary existent in itself, according to Ibn Sina. Strictly speaking, therefore, it did not have essence in general, otherwise it would have a definition and consequently be divisible into the parts into which the definition was divisible, and would not be an absolute unity. It would not even have a name. And if it were called necessary existent (or necessary being), it was thereby meant that its being was necessary and not that whose being was necessary. Its existential necessity was only an explanation (*sharh*) of a certain idea for which there was no name, namely that its existence was necessary.[40]

For the same reason the necessary existent could not be qualified as substance—for the quiddity of substance did not contain the idea of its existence as something necessary. Ibn Sina repeatedly stressed that the necessary existent in itself could be called 'substance' only by broadening the concept of substance, but then, if one Zayd was designated as substance, it would be simultaneously known that this Zayd actually necessarily existed, and that would be silly. That is why, Ibn Sina said, the necessary existent could be reliably and adequately designated only by employing the common designations used when speaking of single things, because the necessary existent in itself, like them, was given to us directly and indefinitely.

Only two kinds of attribute could be ascribed to the necessary existent, Ibn Sina wrote, viz., those that expressed its relation to everything that was outside it, and those that indicated the absence of any positive attributes in it. Thus, following a tradition that had its beginning in Mu'tazilism, he endowed the necessary existent with only correlative and negative attributes if it was characterised, say, as the first principle, then, bearing in mind its relation to the possible existent as an aggregate of objects dependent in their being on its existence, and if it was called 'eternal', that meant denial of the beginning of its existence, or ascribing it a negative attribute of beginninglessness. In either case, Ibn Sina noted, the name created an impression that the attribute belonged to the necessary existent itself, as happened in common speech, when, for example, someone was called rich or poor; the person owed the first designation to his relation to certain things outside him, and the second to the absence of such, although it would seem at first glance that both indicated the presence of positive attributes inherent in himself.

As for the theme of the absolute unity of the necessary existent, Ibn Sina said in one place that the first principle was comparable in that respect only with a point. In fact, the necessary existent in itself was, for him, a kind of metaphysical point, and its relation to the possible existent precisely as such was very graphically shown in his *Hayy ibn Yaqzan* in which it was symbolised by the pole. The first principle, like a point, did not possess independent being; at the same time it existed, and that not only in our minds but also in reality. Its objective being could, in fact, only be designated through its relation with another and denial of the other—things were the same with a point in its relation to a line or a surface and their parts.

The necessary existent, being the final cause of being, was also its efficient cause, since it evoked an all-embracing striving for being in it. And that was not an abstract, metaphysical conception; the idea was produced by Ibn Sina's whole philosophy: matter strove to acquire form, because the cause of its being was in form; forms struggled with one another for matter, and so fought for their actual existence; the nutritive faculty functioned, since its purpose was to maintain the individual's being; the reproductive faculty functioned, for its purpose was to maintain the species; the faculty of reason, by attaining the level of acquired intellect, ensured itself individual immortality; the celestial spheres, being in steady, uniform circular motion, resembled eternal immutable being to the maximum extent for the corporeal world. Everything— from the idea that anticipated the first law of motion to the treatment of love and public affairs—revolved around one and the same thought, that of the existent's universal striving and encompassing love (*'ishq*) for being, which consisted in this striving itself and in this love.

Ibn Sina explained even the origin of music—the art most isolated, in the ideas of the Moslem Middle Ages, from the values of benefit and life—from this idea; the needs of the maintenance of the existence of animals as species were connected with the necessity of communication between the individuals of a species (during mating; in order to maintain contact with offspring, etc.), forced them to communicate with each other by means of sounds; these sounds were a prototype of human speech, which was of paramount importance for people, since their life was inconceivable outside society, i. e. without intercourse with their like; the diversity of the communicative functions of speech (when, for example, one wanted to tempt someone, to express submission, to show strength) gave rise to diversity in the modulation of the voice; the intonational richness of human speech generated vocal and then, too, instrumental music.

Correspondingly not-being, according to Ibn Sina, could not be the object of love because it was absolute evil. The being of things capable of becoming a source of evil was necessary, however, in the same way as all the rest, and their not-being would be a greater evil than what would come of their being, just as the not-being of our world would be a greater evil than its being such as it is. The point here concerned evil for things and not for man. If some kind of thing were discovered, Bahmanyar wrote, disastrous for man, but perfect in their essence, then those who thought the world created for man would certainly take it for evil, although things were not so.[41] Everything was fine in its own way since the perfection of things consisted in their being such as they had to be and occupying a proper place in this perfect, good world order.

Such was the optimistic result of Ibn Sina's 'universal science', shared by all the other Islamic Aristotelians to the extent that their metaphysics expressed their appreciation of this science's object. Ibn Sina himself wrote that true order and pure good were the essence (*zat*) of the Creator, and that the order of the world and its goodness stemmed from His essence. And everything that stemmed from His essence existed in combination with an order suitable for it, since His essence was order and good, because the goal of the created was His essence. This order and goodness were obvious in everything, since everything emanated from Him, Ibn Sina said, but in the language of another science, which he called the 'divine science' in a special sense of the term.[42]

'THE DIVINE SCIENCE'

The philosophy of the Islamic Aristotelians is usually associated with this, the completing part of their metaphysics, devoted to the necessary existent in itself

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and its immanentising in the phenomenal world. It is this part of metaphysics that has given some scholars the excuse to speak of them not as Aristotelians but mainly as Neoplatonists.

This part of metaphysics rested on two conceptions: that of necessary being in relation to possible being, and that of the latter's emanational origin from the former. The question arises what were the direct sources from which the *falasifa* drew their idea of the first principle of the existent as necessary existent and of the 'flow' of the possible existent from it.

The first mention of these two concepts are found in Farabi's treatise on Zeno the Senior, which begins by stating that he, Farabi, had seen treatises belonging to Zeno, the disciple of Aristotle, and to the Greek Elder (*ash-shaykh al-yunani*) which had been interpreted by Christians.[43] In Moslem mediaeval literature, by Greek Elder was meant Plotinus. And by Zeno the Senior (although he was sometimes confused with Zeno the Eleatic) was understood nevertheless Zeno of Citium, the founder of Stoicism. It was from these treatises of a syncretic content that Farabi seemingly took the scheme of the emanation of the existent from the first principle, which embraced the cosmic intellects and the celestial spheres corresponding to them, together with the experience of Christian thinkers' bringing it into accord with the principles of the monotheistic religion.

Farabi's treatise consists of six sections: (1) an argument for the existence of a first principle (*al-mabda' al-awwal*); (2) about its attributes; (3) about the relation of things to it; (4) about prophecy; (5) about religious law; (6) about the soul's return to its former abode. The content of the work confirms the thesis that the emanative principle was the 'bridge' that united the theoretical sciences of the Aristotelians of the Moslem East with the practical sciences, and consequently with religion as well, because it was this conception that was set out in the third section of the treatise, the term 'illumination' (*ishraq*) from which came the name of the school of Moslem Illuminants (*al-ishraqiyya*), also known as 'Stoics', being used in it together with the term 'emanation' (*sudur*, *fayd*).

The aim of the 'divine science' developed by Farabi and Ibn Sina was to express, in simple, understandable symbols, ideas that would correspond to the dogmas of the monotheistic religion as regards God and the world created by Him, on the one hand, and on the other would not contradict the philosophical world outlook, but on the contrary would help make it familiar to those who could penetrate the secret, innermost sense of these symbols, resolving the contradictions arising through their conceptual interpretation.

The necessary-existent-in-itself functioned here as the creator of the world. It was endowed with correlative and negative attributes. The negative attributes of the necessary existent signified that it existed outside the world, i. e. outside the existent given to us in our finite experience, and the correlative ones meant that it was not outside the world. In *Hayy ibn Yaqzan* this dialectic of the first cause was expressed by saying that its beauty, as it were, was a screen of its beauty; when it revealed itself, it hid itself as it were, and in manifesting itself it concealed itself as it were. So it was with the sun: when it was covered by a haze it was clearly visible, but when it shone it was inaccessible to the gaze, because its light was its veil to light.[44] These attributes accorded both with the absolute simplicity of the necessary existent and with the strict monotheism of Islam.

But Islam ascribed a host of qualities to God expressed in His 'beautiful names' and epithets. Ibn Sina did not deny them; he reduced these epithets to negative or correlative attributes or their combination: the 'bountiful' meant that the will of the first cause was not directed to any aim or goal; by 'willing' was meant that in thinking of the first cause was the beginning for the 'total order of good'; 'thinking' meant that matter was not added to it. Thought, identical with the thinking and the object of thinking, was a symbol that was able as adequately as possible to express the nature of the necessary of existence although the thinking was purely homonymously ascribed to the first cause, because thinking as such, i. e. human thinking, was posterior to, and secondary as regards its object, while the 'thinking' of the necessary existent was prior in relation to it. This symbol was born in fact by transferring to the object of intellectual intuition (by means of which the totality of beings was comprehended) of the appellation of the psychic power apprehending it—thought, intellect—since it was intellect that was this faculty, which could be deprived of all connections with matter at the level of acquired intellect. Intuition, like that by which the 'hovering man' was aware of his Ego, did not introduce into the first principle either multitude, or changes connected with the multiplicity and variability of the cognised object. The existent, or rather the relation between existing things, is given in the thinking of the Necessary Being as a single idea (*ma'na*) that contained the whole diversity of what exists, just as an idea coming into the head of a party in a dispute contained the whole host of arguments that he later developed before his opponent, and possessed intransient truth just as the theory of eclipses known to astronomers was true and intransient as regards all cases of this phenomenon, in opposition to predictions about separate eclipses.

The Necessary Existent thought of everything 'universally' because it was the whole wealth of the phenomenal world concentrated in a single metaphysical point 'before' its development in space and time, or before immanentisation of the first principle or its emanation and flux. Thought, intellect was an anthropomorphic symbol similar to the anthropomorphic symbol of a law we used in reference to nature, which (we recall) was employed by Ibn Sina instead of the symbol of cosmic intelligence that denoted the pattern of movement of a celestial sphere. But, like the other Islamic Aristotelians, he interpreted the symbol of intellect more broadly, as an order of things that included laws as well, not in isolated form, but rather in the way theorems are included in Euclidean geometry.

Islamic Aristotelians therefore interpreted man's connection with active intellect as a cognising of what we call the laws of nature, as identity of the order of ideas in man's mind and the order of things outside his mind. That idea was close both to Stoicism and to the Aristotelian position on the identity of the actually comprehending and the actually comprehended.

Hence, too, the proposition that intelligible objects 'think' themselves, which meant that the laws of nature arose from one another and could not come into mutual contradiction, and that the 'logic' or order of things could not be disturbed by the intervention of supernatural powers. The Islamic Aristotelians doctrine of emanation, the flowing out of things from the necessary existent, also has to be understood in the light of that as an act of creation expressed in terms of that doctrine. It is not an ontological process but a purely mental, logical relation of the dependence of the possibly existent on the necessarily existent. In his book *Commentaries (Ta'liqat)* Ibn Sina directly said that emanation was a necessary logical conclusion or inference (*luzum*) that could properly be called an 'emanation' because the flowing out of existing things from the creator was realised in the form of a necessary consequence and not in dependence on a will resulting from an accident.[45]

The sense of emanation of the possible existent from the necessary existent is well conveyed by the examples of Ibn Sina; the union of fire and a fuel material of necessity caused a conflagration (other things being equal); twice two of necessity made four. In both cases the first term was the necessary existent in relation to the second as possibly existent, which became a necessary existent, because of the first, through another. Then first case belonged to physics, the second to mathematics. Metaphysics was not touched on in them, but it can be concluded by extrapolation that the unity of the necessary existent and the possible existent should pass into absolute identity (and not into relative only, as in the case of $2 + 2 = 4$), when it was a matter of a pantheistic God and a created world. The difference between them was not essential and not numeric, but was dependent only on one's point of view (*bi-l-i'tibar* in Islamic Aristotelians' terminology); in the one case the existent was treated as outside time and space, as something that existed in timeless eternity (*sarmad*) and in the other as developing in space and time. Each stage of emanation correspondingly signified the sphere of the existent for which 'existence' was predicated by analogy in descending order of intensity, while it was predicated for the necessary-existent-in-itself with maximum 'force'.

The necessary existent thought itself, and in doing so thought everything. Thinking about itself was its own being, thinking about all things was emanation of the being of things, of their 'creation'. Since the first cause (principle) was absolutely one, only something single could emanate from it—otherwise the existence in it of two or more aspects really differing from one another would have to be supposed, but it could not have them, just as a point had no sides. The first intelligence, in which there was already plurality, was the first principle's first creation; this intelligence was possible in itself, but was necessary because of the necessary existent. Since the first intelligence thought the necessary existent, the second intelligence came from it; since it thought itself as necessary being, because of the necessary-existent-in-itself, the cosmic soul corresponding to the second intelligence came from it; since it thought itself as possible existent, a heavenly sphere appropriate to this soul came from it.

In the same way, since the second intelligence thought the first intelligence, a third intelligence came from it; since it thought itself as necessary-existent-through-another, a soul came from it corresponding to the third intelligence; and since the second intelligence thought itself as possible-existent-in-itself, a heavenly sphere came from it corresponding to the second cosmic soul, and so on in descending order down to the sublunary world governed by active intelligence.

As the Necessary Being was interpreted on the religious plane as God, cosmic substances isolated from matter were obtained by a corresponding interpretation: the souls of the spheres and cosmic intelligences were angels. Interestingly, however, Ibn Sina sometimes did not quite tie up the astrological description of the soul in *Hayy ibn Yaqzan* with the image of angels; that relates especially to the sphere of Mars, which was ruled by a devil-like red-haired king.

Clearly, the emanation of the cosmic substances one from another could not be an ontological or cosmological 'process' to a greater extent than the emanation of the possible existence taken as a whole from the necessary existent; the supposition of the opposite would contradict the definition of substance (in precisely the same way as if the 'uniting' of human intellect and active intelligence were understood literally as a substantial merging). Furthermore, the cosmic intelligences and souls, which served the same function for the Islamic Aristotelians as the movers of the celestial spheres in Aristotle's cosmology, in themselves formed a single intelligence of the Universe, and a single soul of the Universe, which in their essence, as interpreted by Islamic Aristotelians, corresponded to Aristotle's *nous*, only by separating its two functions, viz., form of forms and prime mover. The intelligence of the Universe symbolised the order of the Universe for the Islamic Aristotelians, and the soul of the Universe the force acting in it.

The special purpose of the intelligence that ruled the sublunary world was that nature comprehended itself with its aid; it was (Ibn Sina's) so-called 'Giver of Forms' (*Wahib al-Suwar*) and at the same time the intellect of the mankind.

What did emanation really symbolise?

To answer that we must trace the supposed movement of thought of a naturalist who set out to find the first cause of the phenomena around him. His thought, seemingly, moved, passing from contemplation of natural bodies to observation of how the forces contained in them functioned, and then to the regularities by which these forces operated; becoming convinced that these regularities were determined by the motion of sun and other celestial bodies, he mentally moved from one level of the cosmic hierarchy to another, superior one that determined the movement of the sphere at a lower level; his thought thereby passed at each level (as with the study of earthly processes) from contemplation of the body to its movement, and from the movement to the pattern governing it. The emanation of cosmic substances was thus a scheme in which the movement of the naturalist's thought (passing from consequences to causes, and from less general to more general causes) was reproduced retrospectively.

The first intelligence, which (as we have seen) had no astronomical sphere corresponding to it, unlike the lower intelligences, had a special place in this scheme. The question arose in respect of this intelligence of how it, properly speaking, should be distinguished from the necessary being if, according to the theory of emanation, it symbolised the idea, the thought of the first principle.

Bahmanyar, explaining the interpretation of necessary existent given by Ibn Sina, wrote that if the necessitousness of its existence was determined by it itself, and by its being the necessary-existent-in-itself that satisfied the condition that being, say, an A, it could not be not-A, then the necessary-existent-in-itself would be only A.[46] But the first intelligence was some B and at the same time, being the thought of the first being, was identical to it, i. e. A, since it was the identity of the thought, the thinker, and the thing thought about. The difficulty was resolved in the same way as the children's conundrum: 'and' was left. Here there is a certain 'and', namely primary matter, which at the level of abstraction corresponding to the first intelligence, i. e. the level at which there are as yet no cosmic souls and bodies, is 'imperceptible' and, as it were, purely nothing.

In fact, in the description of emanation that starts in the thinking of the first intelligence, the origin of three things from it is mentioned, viz. intelligence, soul, and celestial sphere; in reality it should have been a matter of four things, namely intelligence, soul, corporeal form, and its matter, because the heavenly sphere is a body, and a body is a composite substance. And in *Zeno the Senior* Farabi spoke about intelligence, the soul of the sphere, and the form that appeared as the cause of the actual existence if matter, i.e. corporeal form, being obtained through the thinking of the first creation (first intelligence).[47] It was assumed that matter already existed, though potentially.

The existence of primary matter at the supreme level of the hierarchy of being was also implied in Ibn Sina's allegorical treatise. In his *Hayy ibn Yaqzan* he talked of the material world (the West) before describing the 'spiritual substances'; the topmost sphere of this world was formed by a mentally comprehended starless heaven, whose horizons were so far unknown (i. e. something limitless and indeterminate). This incorporeal, sensibly unperceivable heaven was at the same level of the hierarchy of being where the first intelligence resided in the picture of the 'spiritual world' (the East). In his *Treatise about Birds* this same heaven was symbolised by a mountain range inhabited by birds of paradise, which symbolised souls. In this case 'spirituality' meant the intelligibility and incorporeality of primary matter.

Finally, in old Eastern drawings with a depiction of the celestial spheres in colour, these were completed at the periphery by a sphere coloured black and located above the outermost, i.e. last of the physically existing spheres. Here black symbolised primary matter as the antipode of light and of formed and definite being.

It remains to answer a question arising from this, viz. at what stage of the emanation of the existent from the first principle did this intelligible primary matter hidden from the eye make its appearance?

We find the answer in a unique manuscript of the so-called *Theology of Aristotle* kept in Leningrad, an Arabic translation, written in Old Hebrew letters, of the Syriac text of the 'full version' of the work that underlay the 'divine science'. This text is called a 'full version' because places have been preserved in it that are omitted in the widely disseminated texts of this apocryphal work, after it had been edited by Kindi (in contrast to other versions, this one contains no mention in the heading that the translation of the text, made by Himsi, had been edited by the 'Philosopher of the Arabs'). In this version of the' *Teology* it is said that the divinity had created intellect and made it the cause, direct or indirect, of other things. The divinity was the creator both of intelligence and of its cause; it figured as the cause of intelligence in a double way, and there was nothing between it and intelligence except its bidding, i.e. its word, which was the cause of intelligence, then as intelligence the cause of the soul, and the soul the cause of nature, and nature the cause of individual beings.[48]

On closer examination the first intelligence proves not to be the first creation at all, because its 'genesis' was mediated by the bidding, or the divine word 'Be!', which fully corresponded to the religious doctrine of the beginning of creation. But what did this 'word' and 'bidding' mean in philosophical language? We find hints in a number of other places in the Leningrad manuscript that it is the primary matter. It is said, for example, that the divine word united with intelligence so that it was impossible to imagine any intermediary between them, that it formed a unity, and that this word, being neither rest nor movement, was described as 'non-being' (*rasamuha bi-l-lays*). Final confirmation we discovered outside the text of the *Theology* itself, in the *Treatise of the Greek Elder* (i. e. Plotinus—*Authors) on the Explanation of the Spiritual and Corporeal Worlds*, in which it is stated that things arose from the Creator through His goodness, and that *primary matter was the first that was formed from Him*, then soul, then nature, and then body.[49]

Both these texts go back to Plotinus, and they both treat primary matter as the principle that formed the first, though 'invisible', stage of emanation and was the immediate cause of the first intelligence, which in turn symbolised the order of the world, or Nature with a capital N. Ibn Sina compared prime matter in his allegorical novel with a haze covering the sun; the sun was the first principle which 'blinded the eye' because it did not yield to conceptual definition and was amenable only to comprehension through intellectual intuition; the haze was primary matter as the principle mediating discovery of the necessary existent in itself in the phenomenal world: the sun's disc, visible to us through the haze, was the phenomenal world from the standpoint of its most abstract form, i. e. the form of the order of things, of their logos compressed into one idea.

The first cause thus figured for Farabi and Ibn Sina, and the Islamic Aristotelians, as the maximum identity of the abstract form of the universe and primary matter. It was the same unique thing, Aristotle's first substance, but such that form and matter constituted not a unity in it but an identity which was realised, however, somewhere in an infinite limit. It was this idea that Ibn Sina was striving to convey when he compared the first principle with the pole at which darkness and light, West and East, prime matter and first intelligence merged.

Why was it necessary for Islamic Aristotelians to deviate so clearly from the content of the twelfth book of Aristotle's *Metaphysics*, which corresponded to the section of metaphysics that Ibn Sina called the 'divine science' in a special sense of that term? An answer has been given above in general form: viz. in order to unite the theoretical sciences with the practical. We can now explain the reason for this departure from Aristotle's 'first philosophy' in a more concrete way by the need to complete his ontology, crowned by the conception of the first mover, by introducing the concept of the 'Necessary Being'. For the task of the concluding part of metaphysics was to create a theology or metatheology (when *kalam* was regarded, in the quality of theology, as an apologetic science in Farabi's 'virtuous city'), intended to replace religion that imitated the false 'philosophy', by 'true religion'. It was to translate the principles of the true philosophy, in the images of emanation, into a language understandable by the multitude, and to assert the eternity and autonomy of nature. For Aristotle *arche* was the sought-for principle of movement (change) and of the formation of the world, but for Farabi, Ibn Sina, and their successors the principle of the existent itself had to be found, since the traditional God was the principle precisely of the existent, and not simply of movement, and of the change of forms of existing things.

Plotinus, introducing the concept of the One, was quite logical when he declared it 'non-existent', because the principle (source, origin) of the existent could not be the existent itself, as the first mover could not be something that moved (otherwise there would be nothing first but, on the contrary, endless regress). The Brethren of Purity, adopting the conception of the One, were also quite consistent, since they declared that God existed outside both being and not-being. As for the Islamic Aristotelians, although the term 'necessary of existence' (*wajib al-wujud*—'necessary existent' in our translation) did not formally contain the idea of the first principles as something existent, they nevertheless spoke of it as an existent, a 'necessary existent'. That was due to the existence of the first principle being demonstrated in their philosophy and not postulated; the necessary being was contemplated conceptually through possible existent, endowed with attributes, but not comprehended simply as an object of mystical experience. The main difference of their emanational conception from Plotinus' corresponding doctrine was precisely that there was no room in it for mysticism. But that was achieved by breaking the system's unity and consistency: while the One was portrayed beyond the existent in Plotinus, it was part of it for Ibn Sina. But he still continued, with Aristotle, to divide the existent into substance and accidents, while the first cause was neither substance nor accident for him.

Shahrastani drew attention to this inconsistency in Ibn Sina's philosophy, and therefore divided the existent into the possible and the necessary; the possible existent was then subdivided into substance and accidents. Incidentally, Ibn Sina's pupil Bahmanyar had revealed before Shahrastani the tendency to limit the field of application of the categorial scheme to the possible existent.

The notion of the relation of objects of the phenomenal world to necessary being, and deduction of their diversity from the first principle by means of the emanational conception appeared quite artificial. The conception was justly criticised by Ghazali, who advanced five arguments in his *Incoherence of the Philosophers* to refute it:

(1) If the possibility of existence in the First Intellect is identical with its being, it cannot be the cause of the origin of plurality, and if it is not identical with its being, then the necessity of being in the First Principle must also not be identical with its being.[50]

(2) The thinking of the First Intellect directed to the First Principle is either identical or not identical with its being and its thinking directed to itself. If it is identical with them, then there is no plurality in its essence, but if not, then this plurality must be peculiar to the First Principle since in comprehending itself it comprehends all the rest at the same time.

(3) The *falasifa* distinguished three aspects in the First Intellect, but they could count even more. One could, for example, distinguish the essence of the First Intellect, its thinking about itself, its thinking about its principle, its being as possible existence, and its being as necessary being through another.[51]

(4) The triplicity of the First Intellect is not sufficient

to explain the essences emanating from it. For the body of the first heavenly sphere is already triple, because it consists, firstly, of matter and form; secondly, it has a certain magnitude which must also have its special principle, since it could be bigger or smaller; thirdly there must also be a special cause for singling out two points as the poles from all the points on this sphere.[52]

(5) The *falasifa* could not indicate the difference between the argument about the origin from the first intelligence of the highest sphere of the world, of its soul, and the subordinate intellect, on the one hand, and the argument of him who could begin to arrive at the existence of the heavenly sphere, its soul, etc., from the thinking of an absent (i.e. possible existent) man about himself and his Creator, by citing the conception of emanation.[53]

The artificial constructions of the conception of emanation were to serve Ibn Sina as confirmation of the essential unity of the world and its accidental plurality, and as confirmation of the idea that existence and unity were predicated as intensively as possible to the world as an integral entity, and with a diminishingly intensive extent to the different stages of emanation, beginning with the first intellect and ending with the world of generation and corruption. But the rules of logic were broken by that. Ibn Sina claimed, for example, that entities detached from matter existed in a timeless eternity (*sarmad*) which he characterised as their relation to one another; the relation of these entities to the individual material beings he characterised as an eternity (*dahr*) and the relation of the individual material beings to one another he characterised as time (*zaman*). Meanwhile he left unargued the question of whether something metaphysical and timeless could have some sort of temporal relation with anything physical existing in movement, which meant also existing in time.

Consequently, the unity he ascribed to the first cause, the first intellect, and the world as a single body, was also employed either as a homonym, or by analogy, so that the underlying principle, say, of his conception of emanation, according to which only one could emanate from one, proved unsound. If one and the same thing was meant here by 'one' then, as Ghazali justly remarked, it inevitably entailed, with consistent realisation, a proposition that there were no compound things at all in world, that there were only simple unities emanating from one another in the form of a unilinear causal chain, while Ibn Sina himself recognised the existence of compound substances in the world, i.e. individual things composed of form and matter.

The logical errors in the 'divine science' that mediated the transition from the preceding sections of metaphysics to ethics and politics, are explainable by the auxiliary role of this section of the 'first philosophy'. Other facts also testify to this role. Ibn Sina spoke, moreover, for example, about 'illumination' (*ishraq*), instead of emanation, or about the second intellect 'coming out' (*yahsulu*) and not 'emanating' from the thinking of the first intellect; or used the term 'epiphany' (*tajalli*) instead of 'emanation'. In his *Directions and Remarks (Al-isharat wa-t-tanbihat)* there is no conception of an emanation or of anything taking its place, but there is a description of the degrees of approximation to the mystical intuitive understanding of godhood of the gnostic-sufi (*arif*). And in Bahmanyar's encyclopaedic work, which contains his teacher's essential ideas, neither emanation nor illumination, nor epiphany, nor the mystic-intuitive understanding of godhood occurs.

FROM IBN SINA'S METAPHYSICS TO IBN RUSHD'S

If we exclude the false, though commonly held notion that the Aristotelians of Moslem Spain, and primarily Ibn Rusd, were concerned, when they occupied themselves with problems of metaphysics, with cleansing Aristotle's ontology of Neoplatonist admixtures introduced into it by their eastern predecessors, the difference in the metaphysical conceptions of Ibn Rushd and Ibn Sina as thinkers who crowned the development of *falsafa* in the west and the east of the Moslem world, must be explained by the differences in the political situation in the two regions. Aristotelianism had taken shape and functioned in the east, as a rule, in a Shi'ite environment, and had functioned if not as a form of opposition to the Sunnite regime, then at least as a symbol of ideological independence. There was no such specific situation in the Moslem West. Correspondingly, the idea, too, of familiarising people with an esoteric doctrine through the passing of a number of degrees of the initiation or creation of an ideal religion for the future 'virtuous city' which imitated the true philosophy, was perceived there as far-fetched and unreal.

In addition, Ibn Rushd's arguments about the 'first philosophy' were realised in his polemic against Ghazali, and through him against the '*mutakallims* of the three religions'. It is quite probable that the decisive demarcation he made between the spheres of competence of philosophy and religion was influenced by Ghazali's similar views. We must note, however, that Ibn Rushd's notions about the essence of Mu'tasilite and Ash'arite *kalam* were evidently very limited, which he himself sometimes admitted (this can be deduced indirectly from the equally limited notions of the speculative theology of Islam of his contemporary and fellow-countryman Moses Maimonides).

In his commentary on the twelfth book of Aristotle's *Metaphysics* Ibn Rushd set out the main conditions for deciding the problem of the efficient cause and origin of things as follows. Two diametrically opposed views were advanced on the one hand, he said, by the authors of the doctrine of latent pre-existence (*'kumun'*) and on the other hand by the followers of the doctrine of creation *ex nihilo*. By the authors of the doctrine of latent pre-existence he evdently meant primarily Anaxagoras and Nazzam, in whose conviction everything existed in everything, coming into being was nothing else than the emergence of things from one another, and an agent was needed to derive and differentiate them from one another. The agent in their opinion, was clearly no more than the mover.[54]

As for the protagonists of the doctrine of the creation of things *ex nihilo*, they included all those who regarded the agent as an absolute demiurge whose creative act was not required in pre-existing matter. Such was the generally accepted opinion, Ibn Rush wrote, of the *mutakallims* of the Moslem and Christian communities, so that the Christian John Philoponus was even convinced that the possibility existed in an agent only, as Farabi had said in his 'Changing Beings'.[55]

Ibn Rushd distinguished intermediate points of view in addition to these two conceptions. These, too, were divided into two, one of them in turn having two additional varieties. All these points of view had it in common that their adherents treated coming into being as a change of substance, denying the creation of things from nothing. One of these opinions, he wrote, was that of those who supposed that the agent was he who created, creating form and firmly establishing it in primary matter. This was the 'Giver of Forms'. These thinkers included Ibn Sina. Others suggested that such an agent existed in a dual way: either separated from primary matter or not separated. The agent not separated was, for example, from their standpoint, fire that caused fire, or man who generated man; the separated agent generated animals or plants without creating them from an animal or plant like them. Such was the doctrine of Themistius, and possibly also of Farabi, as would appear from his statements about the two philosophies (the reference is to Farabi's treatise *The Harmony between Plato and Aristotle —Kitab al-jam' bayna ra'yay al-hakimayn aflatun al-ilahi wa-aristutalis—Authors*), although the adduction of this agent to animals that reproduce sexually is doubtful.

As for the third doctrine, Ibn Rushd went on, it was one that he took from Aristotle. According to it the agent realised a combination of matter and form, setting matter into motion and altering it in such a way that the potential of the form included in it was actualised. This view was similar to that of those who suggested that the agent acted by uniting isolated forms and introducing order into them, that is to say of those who shared the doctrine of Empedocles.[56]

Aristotle's point of view, in Ibn Rushd's opinion, was a kind of synthesis of all the other conceptions, eliminating their extremes and preserving the elements of truth. Everyone, he wrote, who expressed himself for creation, hidden pre-existence, combination and separation, approached this thought but did not reach it.[57] In bringing out Aristotle's understanding of the union of form and matter in a more detailed way, Ibn Rushd wrote that Aristotle's statement that like arose from like, or close to like, did not have a sense at all that like affected the form of what was like it through its essence and its form. The statement had the meaning that the like actualised the potential form of its like, but figured as agent not at all because it introduced something into primary matter from outside. It was the same with substance as with accidents: heat did not introduce warmth into a heated body from outside—in this case the potentially hot became the actually hot. It was the same with magnitude, which was related to becoming: namely, when magnitude was transferred from one quantity to another during becoming, this transfer was not done through a certain quantity coming into this magnitude from outside. In the same way transferrence was not something emanating from outside, from an agent.[58]

The previous Aristotelians, Ibn Rushd claimed, having in mind mainly Ibn Sina, had tried to reconcile Aristotle and Plato, without having understood the essence of Aristotle's doctrine. He himself repeatedly came back to Aristotle's arguments against Plato's doctrine about ideas in order to demonstrate its inconsistency, which in his opinion did not rise above the poetic expressions employable when teaching the multitude. In order to demonstrate the absurdity of claims that the particular owed its existence to the universal, the Platonic idea, Ibn Rushd turned to his favourite example of a series of people begotten by one another, without resorting to some universal 'man', or to the example of the physician who treated by his art and in healing the sick did not experience any need for the Platonic idea of health.

But, as appears from the views of Ibn Sina on the genesis of things set out above, especially his conception of 'analogues', Ibn Rushd's reproaches are without foundation. Ibn Sina never spoke of the 'introduction' of forms into matter from outside, and he called active intelligence the Giver of Forms not because it really conferred forms as self-sufficient entities on primary matter, which, according to Ibn Rushd, would have been only predisposed to accept them (for Ibn Sina) by proximate causes. His Giver of Forms was a symbol of the universal conformity to law by which various interconnected factors favouring or preventing the coming into being (actualisation) of one form or another operated within the sublunar world. *The illusion of the introduction of forms into matter from outside was created in Ibn*

Rushd for the reason considered above, namely because of the differences existing in two thinkers in their understanding of the substratum of forms: for Ibn Rushd this was matter in general, for Ibn Sina a concrete body, by virtue of which the above-mentioned factors that functioned in the aggregate as the agent were internal, as it were, for the former, and external, as it were, for the latter.

Ibn Rushd's argument sounds more convincing when he criticises the thesis held by Ibn Sina (and Farabi) about one only stemming from one. In his polemic with Ghazali, he did not try to defend this thesis of the eastern *falasifa.*

On the contrary he supported Ghazali's criticism and added his own that Farabi and Ibn Sina, apart from all else, had contradicted their own thesis of the identity of the object and the subject of man's thinking, and all the more so in the 'thinking' of intellects that were separated from matter. In Ibn Rushd's conviction the thesis of only one stemming from one could be held in relation to the efficient cause, and not in respect of final and formal causes, because any plurality of things could strive to attain a certain aim and acquire a certain form.

In his *Incoherence of the Incoherence* Ibn Rushd pointed out that Farabi and Ibn Sina had made the mistake in this case characterised in Islamic philosophy as equating what was not anemable to observation with that which was (*quiyas al-gha'ib 'ala-sh-shahid*), or in other words likening of the noumenal to the phenomenal. It was necessary, he said, to draw a distinct difference between the concrete mover that represented form in matter, and the abstract mover free from matter; in both the appellation 'mover' was applied homonymically, because the mover free from matter was an absolute agent (*fa'il mutlaq*) from which an absolute action proceeded, the object of which was not a 'special individual object', while the mover 'mixed' with matter was an individual, 'finite' agent (*fa'il muqayyad*), whose action was directed to a certain concrete object (*maf'ul duna maf'ul*).[59]

Something proceeded from the absolute action of the first cause, according to Ibn Rushd, that was simultaneously one and many, namely the constantly changing empirical world around us. The question arises whether this admission did not mean a union in one substratum of two opposites.

We find the answer in Ibn Rushd's commentary on the *Metaphysics*, where it is said that in the opinion of many ancient philosophers oneness was non-plurality, i.e. the opposing of the one and the many had the character of contradictoriness. They were apparently led to such an opinion, Ibn Rushd said here, from comparing unity and plurality with possession and privation, possession always being preferable and 'nobler' than privation. In fact the opposing of the one to the many could not have the character of contradictoriness, because the few were contradictory to the many, but one was not few, since fewness was a characteristic of the divisible.

In contrast to the one and the many, the possible and the necessary were really contradictories, in view of which Ibn Sina had made a gross mistake in dividing the existent into (1) the necessary, (2) the possible, and (3) the possible-in-itself necessary through another. Apropos of this division Ibn Rushd declared that the world was eternal, and that everything eternal was already necessary in itself; when a possible thing became necessary, its nature passed into its opposite, whereas Ibn Sina had spoken of the world as necessary being in itself and necessary being through another. If the existence in the world of universal causal connections were admitted, then the wholeness of the world would be necessary rather than possible.

Ibn Rushd inclined to treat 'possible' as Aristotle had done, i.e. by attributing the expression 'to be or not to be' in statements about the possible to future time, which corresponded to the last meaning of 'possible' in Ibn Sina's classification, i.e. to that which happened only for the most part rather than necessarily when the nature and essence of a thing forced its way to actualisation through a mass of conditions, some of which could prevent its realisation. But he never interpreted the possibility of being as its indeducibility from the essence of an object. In other words he understood the possible and the necessary as ontological modalities, while Ibn Sina, as logical modalities. His criticism of Ibn Sina's metaphysics can therefore be compared to Ghazali's criticism; the latter denied, in the name of Ash'arites the applicability of the concept of the necessary in general outside the context of logical relations.

Here is to be seen the main difference between metaphysics of Ibn Sina, who removed the first principle (necessary-existent-in-itself) from the phenomenal world, as it were, and Ibn Rushd's, who kept it, as it were, within that world. According to Ibn Sina the proof of the existence of the first principle should be realised in metaphysics in which it was defined as that whose essence coincided with its existence, rather than in physics, as with Aristotle. In other words, the first principle for him was not the first mover but the principle of the existence. In his commentary on the 12th book of the *Metaphysics*, in the extant fragments of his *Kitab al-insaf* (*Arbitrage*), Ibn Sina wrote that it was unseemly and improper to come to the First through movement and by starting from its being the principle of movement.[60] Ibn Rushd, on the contrary, returned to the point of view of Aristotle, who identified the first principle with the first mover, affirming that forms existed potentially in primary matter and actually in the first mover.

What was Ibn Rushd implying when he spoke of the first principle as the first mover in which forms existed in the actual state?

Polemising with the *mutakallims*, he said, in one place, that they endowed the first principle, i.e. God, if not with man's corporeal qualities, then in any case with his spiritual ones.

> But [he said ironically] when the theory of the theologians is tested, and shown up to him for whom such an exposure is necessary, it becomes clear that they only made God an eternal man, for they compared the world with the products of art wrought by the will and knowledge and power of man. And when it was objected against them that He must then have a body, they answered that He is eternal and that all bodies are temporal. They were therefore forced to admit an immaterial man who produced all existents. But this theory is nothing but a metaphor and a poetical expression; and metaphorical expressions are certainly convincing, till they are explored, but then their deficiency becomes evident.[61]

Ibn Rushd first proved the unsoundness of the voluntaristic representation of God, pointing out that endowing the All-Highest with will meant ascribing a passive state to Him, and also a striving for something He lacked. To the doctrine of the All-Highest as a personal existent that determined each single phenomenon and ruled the Universe 'like a tyrannical prince who has the highest power, for whom nobody in his dominions can deputize, and of whom no standard or custom is known',[62] he counterposed a theory that the highest principle, which brought individual phenomena into existence, acted according to natural laws, and related to these phenomena just like the head of a hierarchical state did to the affairs of its citizens.

Ibn Rushd, following other Aristotelians, called this immutable first principle 'intellect', i.e. 'the intellect free of matter', because only intellect embraced those objects of knowledge that were invariant and consequently not linked with transient material characteristics. But 'intellect' was a homonym. When speaking about the genesis of the philosophers' concept of the universal intellect, Ibn Rushd wrote:

> when they saw further that the order which reigns in nature and in the act of nature follows an intellectual plan very much like the plan of the craftsman, they realised that there must exist an intellect which causes these natural potencies to act in an intellectual way.[63]

He repeatedly stressed that use of the word 'intellect' in regard to man and to the unfailing first principle that reigned in the Universe was a case of two different things differing essentially from one another and having nothing in common except the name.

This immutable first principle, according to him, could not be intellect in ordinary usage, or an intellectual divinity, precisely because intellect, like will, presupposed a passive state in the subject and also a transition from imperfection to perfection, and the possibility of the simultaneous emanation of two opposites from it, because intellect, unlike the senses, was capable of perceiving two opposed objects at the same time. And in that case, he wrote, he who believes this makes God an eternal man and man a mortal God'.[64]

The essence of this intellect is brought out most fully in the place in the *Incoherence of the Incoherence* where he said:

> It is necessary that this intellect should be the harmony which is the cause of the harmony which exists in the existents, and that it should be impossible to ascribe to its perception knowledge of the universals, let alone knowledge of individuals, because universals are intelligibles, which are consequent on and posterior to existents, whereas on the contrary existents are consequent on this intellect. And this intellect necessarily conceives existents through its essence, not by conceiving the harmony and order which exist in existents through its essence, not by conceiving anything outside its essence...
> ...and that the separate intellect only conceives its own essence, and that by conceiving its own essence it conceives all existents, since its intellect is nothing but the harmony and order which exist on all beings, and this order and harmony is received by the active powers which possess order and harmony and exist in all beings and are called natures by the philosophers.[65]

In Ibn Rushd's theory this intellect designated not only the order of the world but also the energy included in it, which was revealed in activity that was neither free nor necessary (i.e. was governed by some definite nature).

> Demonstrative proof [he wrote] leads to the existence of an agent endowed with a power which is neither voluntary nor natural, which, however, the Divine Law [shari'a] calls 'will', in the same way as demonstrative proof leads to middle terms between things which seemed at first sight to be contrary, without being really so, as when we speak of an existence which is neither inside nor outside the world.[66]

Ibn Rushd's universal intellect was thus Ibn Sina's first intelligence which functioned for him as the first creation and which, according to his hints, corresponded approximately to the religious notions of God, i.e. the demiurge. The first principle that for Ibn Sina rose above this first intellect was the principle of the existent in which the form of forms and primary matter approach, as it were, each other in the infinity; for Ibn Rushd, however, the first principle was the form of forms; it was the first mover that existed in matter itself and brought the potential forms included in it out into an actual state, being the principle not of the existent but of movement, change, and consequently of the coming into being and passing away of things. Ibn Sina's first principle was the abstract unity of the universe, while Ibn Rushd's was the connection and order of things, and at the same time their nature.

One can speak of Ibn Rushd's return to the Aristotelian understanding of the first principle only in a conditional, relative sense. Even more, it cannot be a matter of his having been primarily anxious to rid Aristotelianism of Neoplatonist ideas. If that had been so, he would first of all have freed himself from the conception of emanation. But he himself readily employed this concept to explain the subordination of the movers of the heavenly spheres, which figured as 'secondary causes' uniting and mediating the sublunary world of 'generation and corruption'; and the first principle immutable in its simplicity.

The striving to subordinate the plurality of being to the highest unity, characteristic of Stoics and Neoplatonists, unites Ibn Rushd's ontology with Ibn Sina's metaphysics, and it is that which is the difference of their metaphysics from the *mutakallims*' ontology in which each thing is connected with the whole totality of other things, and that directly, without any 'secondary causes'. Nevertheless, for all of them, both the Aristotelians and the *mutakallims*, a pantheistic tendency to overcome the theistic splitting of being was peculiar. The *mutakallims* taught that the supreme unifying principle of being was knowledge of God which encompassed all individual things and phenomena; the Islamic Aristotelians saw this principle in the divine intellect from which the plurality of heavenly and earthly being developed gradually through 'secondary causes'. But both were inclined to identify this principle with being itself and with the universe itself. The similarity is traceable here, too, in the fact that the Aristotelians and the *mutakallims* usually refrained from explicitly pantheistic statements, like Farabi's claim that the Necessary Being, God, was the 'universe in its unity' (*al-qull fi wahdatihi*).[67] Ibn Rushd, when speaking of the fact that, in the conviction of the philosophers, the essence of the creator 'contains all intellects, nay, all existents' (*al-mawjudat qulluha*), stressed that 'all this is the knowledge of those who are steadfast in their knowledge' (i.e. the concealed knowledge of a narrow circle of philosophers—*Authors*), and all this ... must not be written down'.[68]

A more clear identification of God with the existent can be found in Sufism, the pantheistic doctrine *par excellence*.

NOTES TO CHAPTER 9

[1] Ibn Sina. *Ash-Shifa': al-Ilahiyyat* (Wazarat ath-thaqafa wa-l-irshad al-qawmi, Cairo, 1960), p 21.
[2] *Ibid.*, p 22.
[3] Aristotle. *Metaphysics.* Loeb Classical Library, Wm. Heinemann, London, 1980, p 211.
[4] *Ibid.*
[5] *Ibid.*
[6] *Ibid.*
[7] *Ibid.*
[8] See: Ibn Tufayl. *Risalat Hayy ibn Yaqzan fi asrat al-hikma al-mushriquiyya* (Beirut, 1936).
[9] *Ibid.*, p 90.
[10] *The Holy Qur-an,* S. 11; 17.
[11] George Hourani. *Averroes on the Harmony of Religion and Philosophy* (Luzac & Co., London, 1961), p 56.
[12] *The Holy Qur-an,* S. 14 : 48.
[13] *Ibid.*, p 57.
[14] S. van den Bergh. *Averroes' Tahafut al-Tahafut*, Vol. I (Luzac & Co., London, 1954), p 1.
[15] *Ibid.*, p 3.
[16] *Ibid.*
[17] See: *Ibid.*, p 37.
[18] *Ibid.* p 38.
[19] *Ibid.*, p 42
[20] *Ibid.*, p 51.
[21] *Ibid.*, p 39.
[22] *Ibid.*, p 57.
[23] *Ibid.*
[24] *Ibid.*, pp 58-59.
[25] *Ibid.*, pp 58-59.
[26] *Ibid.*, p 60.
[27] *Ibid.*, p 65.
[28] Ibn Sina. *An-Najat*, pp 211-12.
[29] Ibn Sina. *An-Najat*, p 218.
[30] *Ibid.*
[31] See: Ibn Sina. *Ilahiyyat-i Danishnama-i 'Ala'i* (Teheran, 1952), p 89.
[32] See: Ibn Sina. *An-Najat*, p 220.
[33] See: Ibn Sina. *Ilahiyyat-i Danishnama-i 'Ala'i*, p 39.
[34] *Ibid.*, pp 39-40.
[35] *Ibid.*, p 41.
[36] *Ibid.*, p 40.
[37] S. van den Bergh. *Op. cit.*, pp 354-355.
[38] See: Ibn Sina. *An-Najat*, p 235.
[39] *Ibid.*, pp 251-252.
[40] See: Ibn Sina. *At-ta'liqat* (Al-Hay'a al-'amma li-l-kitab), Cairo, 1973), p 183.
[41] Bahmanyar. *Op. cit.*, Vol. II, p 5.
[42] Ibn Sina. *Al-Ta'liqat*, p 72.
[43] See: Al-Farabi. *Sharh risalat Zaynun al-kabir* (Hyderabad, 1349 A.H), p 3.

[44] See: Ibn Sina. *Hayy ibn Yaqzan*, p 49.
[45] See: Ibn Sina. *At-Ta'liqat*, p 100.
[46] See: Bahmanyar. *Op. cit.*, p 128.
[47] See: Al-Farabi. *Op. cit.*, p 6.
[48] *Athulujya Aristutalis* (Manuscript of the Saltykov-Shchedrin Public Library, Leningrad; collection of P. Firkovich, № 1198, p 27).
[49] See: *Iflutin 'ind al-'arab* (Wukalat al-matbu'at, Kuwait, 1971), p XXXVI.
[50] See: Simon van den Bergh. *Op. cit.*, p 117.
[51] *Ibid.*, pp 139-140.
[52] *Ibid.*, pp 142-145.
[53] *Ibid.*, p 150
[54] See: Ibn Rushd. *Tafsir ma ba'd at-tabi'at* Vol III, edited by M. Bouyges (Beirut, 1948), pp 1497-1498.
[55] *Ibid.*, p 1498.
[56] *Ibid.*, pp 1498-1499.
[57] *Ibid.*, p 1499.
[58] *Ibid.*, p 1500.
[59] See: Simon van der Bergh. *Op. cit.*, pp 107-108.
[60] See: Ibn Sina. *Min Kitab al-insaf* in *Aristu 'ind al -'arab (Ed. Bawadi), (Wakalat al-Matbu'at, Kuwait, 1978), p 23.*
[61] Simon van den Bergh. *Op. cit.*, p 256.
[62] *Ibid.*, p 262.
[63] *Ibid.*, p 262.
[64] *Ibid.*, p 285.
[65] *Ibid.*, p 203.
[66] *Ibid.*, p 4.
[67] See: Al-Farabi. *Kitab al-fusus* (Matba'at majlis da'irat al-ma'arif, Hyderabda, 1345 A.H), p 5.
[68] Simon van den Bergh. *Op. cit.*, pp 121, 267, 281.

SECTION III

Tasawwuf: Philosophy in the Womb of Mysticism

Sufism (Arab. *tasawwuf*[1]) is one of the main trends in the spiritual life of Islam. It had already arisen in the early stages of this religion's development and continues to exist at the present time. Characteristic of it are such features as denial of the world, an orientation to mystical knowledge of God, a cult of 'secret knowledge' and an esoterism and symbolism connected with it. Sufism has gone through two main stages in its development: (1) a prephilosophical ascetic-mystic stage (up to the twelfth century); and (2) a philosophical stage (since the twelfth century) connected with the development of speculative, metaphysical doctrines. The major schools representative of the second stage were Ishraqism and Wujudism the founders of which were, respectively, Suhrawardi (d. 1191) and Ibn Arabi (d. 1240).

10

Prephilosophical Sufism

THE ASCETIC MOVEMENT

Ascetics were at the source of Sufism. The protest of the social lower classes against the sharp differentiation of the Moslem community that began during the reign of the Caliph Usman (A.D. 644-656) and was then strengthened during the rule of the Umayyads (A.D. 661-750), and against the luxury and idle life of the ruling upper class, was reflected in ascetic moods. In the eighth and ninth centuries the main centres of the ascetic movement were Iraq (especially the towns of Basra, Kufa, and Baghdad), the province of Khorassan (especially the town of Balkh), and Egypt. Eminent ascetics of the first two centuries of Islam were Abu ad-Darda (d. 652), Abu Zarr al-Ghifari (d. 652), Hudhayfa ibn al-Yaman (d. 657), all three of whom were among the 'Companions of the Prophet'; Said ibn al-Musayyab (d. 712), al-Hasan al-Basri (d. 728), with whose circle the rise of the Mu'tasilite school was connected; Ibrahim ibn Adham (d. 770), and al-Fadil ibn Ayyad (d. 802). The term 'sufi' did not yet exist then (it appeared only early in the next century). The designation *zahid* (pl. *zuhhad*) 'hermit', or *'abid'* (pl. *'ubbad'*) 'servant (of God)', was usual for the first initiators of the Sufist movement.

These people were distinguished from the broad masses of believers by their rigorism, and heightened perception of religion. A custom of *dhikr* (meaning mentioning or remembering), or ritual mentioning of the name of Allah, was typical of their religious practice. The ritual of *dhikr* was accompanied with certain body movements; subsequently it began to be performed to music and the beating of drums in certain Sufi brotherhoods. Gradually *dhikr*, being interwoven with another Sufi ritual—*sama* (listening to verses to a musical accompaniment), was itself converted into the main element of the religious practice of Sufism, in comparison with which all the other performances of the religious cult were considered secondary and of little significance.

Two trends as regards gaining means of subsistence were characteristic of the way of life of the ascetics of this period. One group made a requirement of honest, exclusively personal labour, which they reduced to the minimum necessary to maintain life. Any surplus obtained should be given to the needy who were unable to work. In addition to this trend an extreme quietist orientation, expressed in the doctrine of *tawakkul* (trusting in God), became stronger and stronger. According to it a person should rely wholly on God, not concern himself with winning his sustenance, live for the moment, and trust that God would care for him tomorrow as he had today. This orientation developed later into the formula 'a Sufi is the son of his moment' (*as-sufi ibn waqtih*). He who trusted in God put himself wholly in the charge of the divine and of fate. In the hands of God he was like a corpse in the hands of a washer of corpses.

The type of social protest characteristic of the antique Cynics found embodiment in the quietism of the *zahid* ascetics, who had the same indifference both to praise and censure. Their demonstrative non-conformism acquired extreme expression in *malamitiya* (people of censure), a trend of Sufism that seemingly arose in Iraq but became most widespread in Khorassan, from where it spread into Central Asia, and then to the rest of the Moslem world. The greatest Malamatites were Abu Hafs al-Haddad (d. 873), Hamdun al-Qassar (d. 885), and Abu Usman al-Hiri (d. 911). Malamatites taught that a person's activity for self-perfection was a deeply personal affair. Everything that happened in his soul was a secret concerning only God, who knew everything hidden. A sufi should not differ outwardly from other people. On the contrary, if people were to count his sins, and to despise and insult him, that should gladden him. It was proof that he was following the correct road, because all the prophets and holy men had been reviled and insulted. The credo of the extreme Malamatites can be formulated as *spernare sperni* (to despise contempt).

In the period between the eighth and tenth centuries A.D. professional mendicant Sufis appeared alongside the individual, solitary ones who gave themselves up to ascetic and mystic 'devotions' without abandoning their regular occupations (crafts, retail trade, etc.). The professionals were usually called *faqir* (beggar in Arab) or *dervish* (the same in Persian); *faqir* and *dervish* were used in the broadest sense as synonyms for *sufi*. Many dervishes lived permanently or temporarily in a kind of hostel (*khanaqa, ribat, zawiya*, or *tekke*), which was usually built at the graves of noble people and major mosques, and existed on *waqf* (gifts bequeathed by some benefactor) or on collected alms. These hostels were most common in cities. The urban Sufi communities in the ninth to eleventh centuries were associated with craft guilds.

Rules of spiritual leadership took shape is Sufi circles, especially in the hostels. Young people wanting to dedicate themselves to the dervish way of life had to find themselves a spiritual mentor, who was usually the head of a hostel and called a *shaikh* in Arabic (elder) and *pirs* in Persian. A person putting himself under the authority of a shaikh was called a *murid* in Arabic (seeker, follower); in relation to him the *shaikh* was *murshid* in Arabic (leader, guide) or *ustadh* in Persian (teacher, master). A *murid* had to pursue a long course of ascetic and contemplative life under the guidance of the *shaikh-murshid* to attain spiritual perfection. A *murid* was obliged to submit wholly to the *shaikh's* will, to carry out any of his instructions unquestioningly, without thinking about either its meaning or its reasonableness. 'In the hands of the *shaikh* the *murid* is like a corpse in the hands of a washer of corpses'—so the maxim that illustrated the Sufi's attitude to God was modified. Furthermore, according to a dictum ascribed to Zu-n-Nun al-Misri (d. c. 860), a *murid's* obedience to his *shaikh* was higher than his obedience to God. Without a teacher it was impossible to take the Sufi road of spiritual perfection since 'for whoever has no teacher, Satan is the mentor'.

The institution of mentorship, it should be noted, was an innovation of sorts in Moslem religious life. For, as we have said above, official Islam did not know mediators between man and God playing the same role as the Church and clergy in Christianity. Paradoxical as it was, the Sufi considered that mentorship did not deprive the Sufi road of its particularly individual character since, in their opinion, there were as many ways to God as there were human souls (*at-turuq ila-l-lah bi-ʻadad anfas al-khala'iq*).

Subsequently the separate dervish cloisters began to unite in big, powerful brotherhoods and orders, each of which had its own system of Sufi practices (*tariqa,* way or road). The term *tariqa,* which appeared in the ninth century A.D., and was taken from the Koran[2], originally meant the various moral and psychological methods by which a person seeking self-perfection could be directed to that goal by the shortest path. This was the mystic path of comprehending God and coming close to him. From the eleventh century '*tariqa*' began to be used as well to designate the various Sufi orders (*ahmadiyya, bektashiyya, junaydiyya, hallajiyya, idrisiyya, qadiriyya, awlawiyya, naqshbandiyya, nimatallahiyya, rifaiyya, haydaiiyya, shadhiliyya, tijaniyya, chishtiyya,* etc.).

The orders united not only the dervishes proper (*faqirs* living in *khanaqas,* hermits, or wanderers) but also Sufis from all social classes living in their homes and leading an ordinary life. A hierarchy of ranks was gradually formed, at the pinnacle of which was the *wali* (or holy man), the 'friend of Allah', also known as the *qutb* (pole of the world). Local shaikhs, *naqibs,* and their so-called deputies, *khalifs,* substituted for *wali* in places. Supernatural powers were usually attributed to the head of an order, and he was sometimes idolised. In many orders a secret, esoteric doctrine was preached, revealed only to some of the members.

As time passed social differentiation among Sufis increased. Some orders, or branches of them, remained faithful to the ascetic traditions that expressed protest of one degree or another, passive, rarely active, against social oppression. In others the doctrine of disinterestedness and poverty began to be interpreted so that a

Sufi could also be rich, so long as he did not become fond of wealth in his soul, and did not, when acquiring it, use violence or coercion and commit a sin. Such Sufis found patrons among the feudal lords and were themselves converted into big spiritual lords. The Sufi shaikhs and orders frequently enjoyed the support and patronage of those in power (for example, under the Almohads, Seljuqids, and Ayyubids).

THE PATHS OF MYSTICISM

The movement of *zahid* ascetics lacked the main element that became characteristic of subsequent Sufism, viz. mystical experience oriented to coming close to God and uniting with him.

In the opinion of Sufi mystics the following Koranic verses were evidence of the immanency of God in the world and of the possibility of intimate communion with Him:[3]

...And He is
With you wheresoever ye
May be. ...
(S. 57 : 4)
...Whithersoever
Ye turn, there is the Presence
of God. ...
(S. 2 : 115)
...There is not
A secret consultation
Between three, but He
Makes the fourth among them,—
Nor between five but
He makes the sixth,—
Nor between fewer or more,
But He is in their midst,
Wheresoever they be. ...
(S. 58 : 7)
...For We
Are nearer to him
Than (his) jugular vein.
(S. 50 : 16)

Mystic closeness to God was to be achieved through love. The idea of love (*mahabba*) of God was traditionally associated with the name of the most famous woman among the Sufi, Rabi‘a al-Adawiyya (d. 801). Her prayers have been preserved:

> O Lord, the stars are shining, people's eyes have closed, the kings have shut their gates... Each lover is sought solitude with his beloved, and here am I in Thine arms...
> O Lord, if I serve Thee from fear of hell, put me in it, but if I serve Thee in hope of Paradise, banish me from it. But if I serve Thee for Thine own sake, do not conceal Thy eternal beauty from me.

Rabi'a's saying in answer to whether she loved the Prophet Muhammed and hated Satan is widely known:

> Love for God so filled my heart that there was not room in it for love or hatred for anyone else.[5]

The first examples of Sufi poetry devoted to mystic love are attributed to her. The following are the best known of them:[6]

In two ways have I loved Thee: selfishly
And with a love that worthy is of Thee.
In selfish love my joy in Thee I find,
While to all else, and others, I am blind.
But in that love which seeks thee worthily,
The veil is raised that I may look on Thee.
Yet is the praise in that or this not mine;
In this and that the praise is wholly Thine.

Rabi'a's verses laid the basis of the mystic lyric that converted Sufism into a genuine hymn of divine love. Outstanding examples of this lyric have been left to us by the greatest Sufi poets: Umar Ibn al-Farid (d. 1235), Farid ad-Din al-Attar (d. c. 1230), Sadi ash-Shirazi (d. 1391), Abd ar-Rahman al-Jami (d. 1492), and others. In his verses the Sufi poet usually complained of the torments of love, lamented the hopelessness of his feeling, sang the praises of the beautiful beloved, her curly locks and all-withering glance, compared her with the sun or a candle, and himself with a moth burnt in her flame. The state of Sufi poets usually likened the state of ecstasy and nearness to the beloved to a feeling of intoxication, which explains the great significance that was given in Sufi lyrics to the poetry of wine (*khamriyyat*). Mystic love of God was usually depicted by Sufis in such images of sensual love that it could not always be unambiguously determined during the reading of their poems with an erotic-hedonistic content, about what love they were concerned with, mystic or earthly. The two plane character of Sufi symbolism was often disguised by singing of the praises of the drinking bout and sensual love. The ambivalence of Sufi poetry explains why its popularity went far beyond the Sufi medium itself.

The Sufi usually sang their love and drinking verses at their gatherings (*majalis*). The verses were sung to the accompaniment of musical instruments, in particular of sting instruments. This listening to verses with music was introduced in many orders as a most effective means of achieving mystic ecstasy. It came to be called *sama* (listening). The ritual of *sama*, which was a further development of *dhikr*, sometimes included ecstatic dancing (*raqs*).

The concept of the ecstatic state (*hal*, pl. *ahwal*) became a new element of Sufi mysticism, along with the idea of divine love. It was introduced by the Egyptian Zu-n-Nun al-Misri. The mystic path (*tariqa*) consisted, as he taught, of a number of refuges designated by the term *maqam*, which was usually associated with the Koranic verse: 'Not one of us but has a place appointed'.[7] *Maqam* differed from *hal* in being a relatively stable state achieved by the voluntary efforts of the pilgrim, while *hal* was a short-lived mood, a momentary illumination that did not depend on the person himself, that was bestowed on him as a divine blessing.

The number, designation, and characteristic of *maqams* and *ahwal* differed from one another in the various Sufi systems. There was no necessary correspondence between them either in number or in sequence. The main *maqams*, most repeated, were the following: *tawba* (confession)—repentance in tears; *wara'* (piety)—absolution for having done an injustice to someone, so that no one would have claims on one; *zuhd* (abstinence)—indifference to worldly goods, both those permissible (*halal*) by religious law and those impermissible (*haram*); *faqr* (poverty)—contentment with the minimum of vital goods; *sabr* (patience)—staunch putting up with difficulties and unhappiness; *tawakkul* (trusting in God); *rida* (agreement)—quietist acceptance of what God foreordained. The most common *ahwal* were: *qurb* (closeness to God); *mahabba* (love); *khawf* (fear); *raja* (hope); *shawq* (passion); *mushahada* (contemplation); and *yaqin* (certitude).

In the ninth century the aim of a pilgrim moved by divine love along the Sufist path began to be interpreted as nearness to God and unity with Him. This unity was designated in Sufist literature by the term *fana'* (disappearance, death, annihilations). In the state of *fana'*, which scholars usually compare with the Buddhist nirvana, the Sufi who had suppressed personal will in himself, and worldly desires and human attributes (*sifat*), became capable of communion with God and was dissolved in Him. But *fana'* was only one side of a dual, dialectical process. A person was drawn into the eternal divine essence, by being dissolved in God, and annihilating his temporal, transient Ego, and acquired true existence, i.e. eternal existence (*baqa*) in the Absolute.

Abu Yazid (Bayazid in Persian) Tayfur al-Bistami (d. 874), whose followers constituted a special current in Sufism, called *tayfuriyya* in honour of him, developed an extreme form of the conception of *fana'*. He was born in Bistam in the north-east of Iran, and was exiled several times from his native city as an infidel (*kafir*) on the grounds of his ecstatic dicta or *shathiyat*, which the theologians considered pretensions to union (*ittihad*) with God, and even to self-deification. One of these dicta was that God, having elevated him once, stood him before Him and said to him: 'O Abu Yazid! My creatures are excited to behold thee'. And Abu Yazid answered: 'Enrich me by Thy oneness and envelop me in Thine I-ness (*ana'iyya*), and elevate me to Thine soleness, so that Thine creatures, when they see me, will say: "We have beheld Thee", and Thou wouldst become this, and I would not be there'.

One of the stories about Abu Yazid says that a man knocked at his door, and Abu Yazid asked him: 'Who do you want?'. The man answered that he wanted Abu Yazid. Then Abu Yazid said: 'Drop in! I'm sorry for you, but there is no one at home except Allah'. The most blasphemous of his utterances was considered to be: 'Glorified am I, glorified, so great is my dignity!' (*'subhani, subhani, ma 'azam shani'*). The seditiousness of this was that the epithet 'glorified' (*subhan*) was ascribed in Moslem tradition only to Allah.[8]

Such utterances caused great indignation among dogmatic theologians. But their author was not persecuted in any way. A mediaeval doxographer later explained this by Abu Yazid's resorting to a ploy common among Sufis, which they used in similar circumstances, namely, passing himself off as stark, raving mad. He seemingly escaped, rather, because he did not get himself involved in political peripeties. For a hidden political motive was usually the reason for persecution for religious dissent, which in that case served only as a pretext. That is also confirmed by the fate of one of the most famous Sufis in the history of Islam, abu Abdallah al-Husayn ibn Mansur al Hallaj, who, when suspected of co-operation with Qarmatians, accepted a martyr's death in Baghdad on 22 March 922.

HALLAJ AND THE BEGINNING OF THEORETICAL REFLECTION

In Hallaj's teaching love of God ceased to be the lot of chosen people, Sufis, and became a cosmic principle permeating all creatures and bringing them close to the Absolute, or the Truth (*al-haqq*). In the state of love subject and object, man and God are merged in an indistinguishable whole. Hallaj depicted the image of this unity in verses that subsequently were very popular in Sufist circles, the gist of which was: 'I am he who hungered, and whom I hungered for is I/ We are two souls dwelling in one body/since we vowed love for each other/we are cited to people as an example/when you see him, you see me/and when you see me you see him'.[9]

Hallaj's verses in which he spoke of the self-manifestation of the divine (*lahut*) and human (*nasut*) were interpreted in a spirit of incarnationism (*hulud*): 'Glory to him whose humanity/manifested the secret of his sparkling godhood!/But He proclaimed himself to His creatures/in an image of him who eats and drinks./So that His creatures saw Him with their own eyes/and looked at Him eye to eye.[10] Hallaj's exclamation (*shath*) *Ana-l-haqq!* (I am the Truth!), which was seen as a claim to self-deification, gave even more grounds for accusing him of incarnationism. At the same time he stressed that the incarnation of the divine in the human was only a self-manifestation of the whole in its parts. God was the totality of everything (*jumlat al-kull*); He therefore could not be limited to some single thing. In that sense God was transcendent; He was above space and time, was not comprehended by the eye, and was not encompassed by the imagination.[11]

Hallaj developed an idea that was destined to become central in speculative Sufism, viz. the idea of the Mohammedan light (*an-nur al-Muhammadi*) that was subsequently developed into the conception of the perfect man (on which we shall touch in detail in the section of wujudism). The Muhammedan light was perennial and the source of all things. Any creation in it appeared in human guise, in the creature man who preceded all others. Therefore Mohammed, the last of the prophets, was the first created being.

From the Mohammedan light came the lights of all the other prophets. Religions were therefore one in their essence. According to Judaism, Christianity, Islam, and other religions are different names designating one and the same thing.[12] An opinion was ascribed to Hallaj, furthermore, that belief and unbelief differ from one another only in name; in reality there was no difference between them![13] That religious, universalist intention subsequently became characteristic of the credo of most Sufists.

Hallaj was one of the first Moslem thinkers to justify the Devil (*Iblis*) and praise his feats. Iblis, according to the Koran, was the only angel who, despite of the bidding of the All-Highest, refused to bow down to Adam, not being afraid of God's punishment. Hallaj called Iblis his friend and teacher. As depicted by him, Iblis was a model of principled tenacity and devotion. For he had not feared God's threats and had remained faithful to his conviction that it was impossible to worship anyone but God; otherwise it would be a breach of monotheism (*tawhid*), understood by Hallaj as the uniqueness of the object of love. The admiration of Satan in Hallaj's doctrine grew into a kind of cult of martyrdom. When preaching in the squares of Baghdad, in the last years of his life, Hallaj begged his hearers to help him suffer. The same longing for martyrdom gripped one of his followers, Ayn al-Qudat al-Hamadhani, who shared the tragic fate of his teacher in 1131. After Hallaj the theme of 'justification of the Devil' became very popular in Sufist literature, being a sort of projection into the field of dogma of the demonstrative nonconformism that guided the Malamatites in their practical affairs.

Hallaj developed the esoteric trend already noted among Sufis in the previous century. He differentiated 'outer' and 'inner' truth. The former was the religious law of Islam (*shari'a*); the latter, *haqiqa* (truth), was esoteric, secret knowledge linked with comprehension of the truth, and unity with God the Absolute. The *shari'a*, that regulated the life of simple believers ceased to be obligatory for Sufis who had attained the grade of *haqiqa*. In Hallaj's opinion, a person remained on the path of the *shari'a* until he attained the shelter of unity with the Truth. When that was attained, the *shari'a* ceased to count in the eyes of such a person.[14]

In Sufi literature *shari'a* and *haqiqa* are often regarded, respectively, as the beginning and the end of the mystic path, the middle of which is designated by the same term as the path as a whole, i.e. *tariqa*. Achievement of *haqiqa* is counted as the lot of only a few Sufis, the so-called knowers or gnostics (*'arifun'*, sing. *'arif'*). Bistami and Hallaj represented the anomistic trend in Sufism expressed in a scornful attitude to the religious laws (*shari'a*) as something formal, external, necessary only in the initial stage of the Sufist path. In their opinion religious laws (*shara'i'*) lost their validity for whoever knew Allah, and all religious prescriptions such as prayers, fasting, alms and the like, lost validity for him who had attained the highest degree of closeness to God (*wiaya*).[15]

In addition, there was another, nomistic trend in Sufism. Its protagonists insisted on Sufis, strict observance of the prescriptions of Moslem law, demanded that they agree their doctrines with the Koran and Sunna, and taught unity with the divinity as an exclusively psychological, and not an ontological act. The following belonged to this moderate trend of Moslem mysticism: Muhasibi, (d. 857), Maruf al-Karkhi (d. 815/6), Sarri as-Saqati (d. 870), Makki (d. 909), Ruwaym (d. 916), Shibli (d. 945), Junayd (d. 910), Qushayri (d. 1072), Harawi al-Ansari (d. 1089). The greatest authority of 'moderate Sufism' was the *faqih*, theologist and philosopher Abu Hamid al-Ghazali.

MANY-FACED GHAZALI

Ghazali (in other readings Ghazzali) was born in 1058 in the village of Ghazala near Tusi (Khorassan). He was educated first in Tusi, then in Jurjan, and finally in Nishapur, where he studied under the Ash'arite Juwayni. After the death of his teacher in 1085 Ghazali was in the court of the Seljuk vizier Nizam al-Mulk, who appointed him teacher of *fiqh* in 1091 in the Nizamiyya *madrasah* (school) founded by him in Baghdad. In 1095, after the murder of Nizam al-Mulk (1092) by Ishmailites, Ghazali left Baghdad on the pretext of making the pilgrimage (*hajj*). He spent eleven years in his wanderings, during which he visited Damascus, Jerusalem, Mecca, and other cities. In 1106 Ghazali began to lecture in the Nizamiyya *madrasah* in Nishapur, to which he had been invited by the vizier Fakhr al-Mulk (son of Nizam al-Mulk). Not long before his death Ghazali returned to Tusi, where he died in 1111.

It is difficult to systematise Ghazali's philosophical ideas, primarily because he differentiated, in some of his works, in particular at the end of his treatise *Mizan al-'amal* (*Balance of Action*), between exoteric views that a person could share with the multitude, and esoteric ones that he shared only with a narrow circle of his fellow-thinkers; his cherished, innermost thoughts were contained, he affirmed, in treatises intended for the elect rather than in published works. We must add that he wrote, in his quasi-autobiographical *Kitab al-munqidh min ad-dalal* (*Preserver from Error*), that his activity in Baghdad had not lacked an *ad hoc* element, and had pursued ambitious ends. That has given some scholars an excuse to doubt his sincerity not only at that stage of his life. In his works that have come down to us, as Ibn Tufayl remarked, he forbade in one place, depending on the public he was addressing, that which he permitted in another; at first he declared some things incompatible with religion, and then himself professed them.[16] That undoubtedly also complicated the question of the authenticity of a number of his works. And even in those whose authenticity is beyond doubt, Ghazali allowed for the 'conditions of time and place':

> It seems that this ... was one of his objects in his books; an indication that he wanted by this to arouse in minds that he adhered to one doctrine in his books but was an Ash'arite with the Ash'arites, a Sufi with the Sufis and a philosopher with the philosophers, so that he was like the man in the verse
> 'One day a Yamanim if I meet a man of Yaman,
> 'And if I meet an 'Admani, I'm an 'Admani.[17]

Let us examine his attitude to the main currents of the spiritual life of his time more closely.

As he remarked in his autobiographical treatise (which is usually compared to St. Augustine's *Confessions*) he began his search for truth with *kalam*. But he did not find comforting answers in it to the questions bothering him, because *kalam*, from his point of view, was predominantly a destructive discipline. The *mutakallims*, he wrote,

> based their arguments on propositions which they had accepted unquestioningly from their opponents and [claimed that] they were compelled to admit them either by their reliance on authority, or by the consensus of the community, or by a bare acceptance of the Koran and traditions.[18]

Therefore *kalam*, which could make a certain contribution to the defence of religion against dangerous innovations, was of little use, in his opinion, for acquiring positive knowledge. In his last work with the eloquent title *The Restraining of the Common People from the Science of Kalam (Iljam al-'awamm 'an 'ilm al-kalam)*, completed a few days before his death, he warned that the methods of *kalam*, with their reliance on logical proofs, could only introduce confusion and not conviction, doubt and not faith into souls of simple folk not theoretically trained. The arguments of the *mutakallims*, he said, were like a medicine that was useful for individual people but harmful for the majority.[19] *Mutakallims*, however, tried to exploit his authority in their struggle to legitimise their position, in spite of the general anti-*kalam* trend of his works. They pointed out that Ghazali himself had recognised the usefulness of *kalam*, if only for some people.

Ghazali made a sharper criticism of *kalam* in his fundamental work *Ihya' 'ulum ad-din* (*The Vivification of Theology*) in which he charged against the *mutakallims* that their science had become an excuse for outrageous displays of fanaticism and loathsome strife, and he actually called for the banning of *kalam*, citing a number of religious authorities.[20] The criticisms of *mutakallims* in *Ihya'* and other of his works were taken firmly into the arsenal of the anti-*kalam* opposition in the following centuries.

At the same time, Ghazali started from the doctrine of the *mutakallims* (and not only the Ash'arites but also the Mu'tazilites, and others), broadly employing the polemical methods of *kalam*, in his *The Incoherence of the Philosophers (Tahafut al-falasifa)* devoted to a critique of a number of propositions of the metaphysics of the Islamic Aristotelians. He argued, moreover, that, when citing certain kalamic ideas, he did not necessarily share them himself. In *The Incoherence* he gave mainly a destructive criticism. His positive programme he put forward in the treatise *Al-Iqtisad fi-l-i'tiqad* (*The Golden Mean in Dogmatics*), which contained, in his opinion, the essence of the teaching of the *mutakallims*. But the representatives of *kalam*, in particular Subki (d. 1370), the eminent historian of Ash'aritism, considered that this treatise and Ghazali's others similar in content were not written according to the *mutakallims'* rules.[21]

Following *kalam*, Ghazali wrote in his autobiography, he began studies in philosophy. He approached the philosophers in a differentiated way. While claiming that there was a stigma of heresy in all the philosophers, whichever of the many categories they belonged to, he nevertheless then and there argued that there was a great gap between the ancient and the most ancient of them, between the late and the early, in the sense that some of them were further from the truth, and others closer to it.[22] Philosophers fell into three categories, according to him: atheists, naturalists, and metaphysicians. The atheists (*dahriyyun*) were the old Greek philosophers who affirmed the eternity of the world and did not recognise the creating and organising role of the Almighty Creator. The naturalists (*tabi'iyyun*) were philosophers who, following their scientific bent, explained all the phenomena of nature, including human consciousness, by natural causes; they denied an other-worldly life and the eschatological dogmas associated with it, although they recognised God. He classed among the metaphysicians (*ilahiyyun*) the last philosophers, Socrates, Plato, and especially Aristotle, who had subjected members of the first two groups to fundamental criticism. Farabi and Ibn Sina, among the philosophising Moslems, also belonged to this group. It was these thinkers of Islamic Aristotelianism who constituted the main object of criticism in his *The Incoherence of the Philosophers.*

It should be noted, however, that right from the beginning, in the foreword to this book, Ghazali drew attention to the mistaken character of the common accusations against the Greek 'metaphysicians', as regards their denial of the fundamental principles of religion, belief in God, prophecy, life after death, and so on. The coryphaei of the philosophers, he wrote, were slandered as regards denial of religion; in fact they believed in God and believed in his messengers; but while sharing these first principles, they were mistaken in certain secondary details.[23] Ghazali distinguished three types of such errors: affirmation of the eternity of the world; the doctrine that Allah knows only the universal, and not the individual; denial of the bodily character of resurrection from the dead, and with it of punishment and reward in the other world. But he developed the same propositions that he had earlier criticised in his *Preserver from Error* and *The Incoherence of the Philosophers* in his *Ma'arij al-quds* (*Holy Staircase*) and *Al-Madnun bih 'ala ghayr ahlih* (*About What Should Not be Disclosed to Unsophisticated People*). This inconsistency has given certain writers grounds for considering the last-named apocryphal.

While criticising some of the theses of the Islamic Aristotelians' metaphysics, especially the part known as the 'divine science' or 'theology' (*ilahiyyat*) Ghazali tried to legitimise other sections of their philosophy, viz. logic, mathematics (which included arithmetic, geometry, and astronomy), and physics (in which he included medicine). In his *Mi'yar al-'ilm* (*Touchstone of Knowledge*), *Al-Qistas al-Mustaqim* (*Just Balance*), and others, he illustrated the logical problematic by examples from the Koran and *fiqh*, even inventing new names for the logical concepts and laws, hoping thereby to mitigate the dogmatic theologians' negative reaction to propaganda for this discipline. He considered logic a science absolutely necessary for obtaining reliable knowledge. In his opinion, it was the threshold of all sciences, and the knowledge of him who did not master it did not deserve to be deemed reliable.[24] That position evoked sharp protest from theologians, like Ibn as-Salah (d. 1245), who proclaimed that logic was the threshold of philosophy, and the threshold of evil was evil, and that whoever engaged in logic would fall into apostasy (*zandaqa*).

Dogmatic theologians were also made indignant by the following point associated with *The Incoherence of the Philosophers*. Before writing it Ghazali had published his *Aims of the Philosophers* (*Maqasid al-falasifa*) in which he had objectively expounded the views of the Islamic Aristotelians, allegedly so as subsequently to refute them. But, in it he had set out their logical views, in particular, at length, and many of their scientific ones, which, by his own admission, he did not intend to criticise and considered not only neutral in regard to religion but even quite acceptable. And the exposition itself even resembled the style of a textbook (with appropriate exercises, etc.). The fact that no reference was made to it in his *Incoherence of the Philosophers*, and that the exposition of the latter had an independent character, attracted attention. All that gave zealots of the faith an excuse to consider it a typical crafty dodge, by which the author, having provoked a polemic with views clearly unacceptable in the eyes of religious dogmatists, occupied himself with spreading them. The fate of this book in the Christian West is worth noting. Dominicus Gundisalvi translated it into Latin in the middle of the thirteenth century, omitting the foreword in which Ghazali mentioned his intention later to criticise the views set forth. The book was published in Venice in 1506 under the title *Algazelis arabis logica et philosophia* as a textbook of Peripatetic philosophy, while Ghazali himself was included among the Islamic Aristotelians.

But if Ghazali expressed himself quite sharply in his works that contained a critique of some of the propositions of the Islamic Aristotelians' metaphysics, declaring their advancement in places a departure from the true religion (*kufr*), in the treatise *The Distinction between Faith and Unbelief* (*Faysal at-tafriqa bayna-l-islam wa-z-zandaqa*) he revealed himself a spokesman of the idea of religious tolerance. In this treatise he warned against hanging labels, and hasty accusations of *kufr*, characteristic in his opinion of souls in which ignorance predominated. Any person who recognised the main principles of religion should be considered, in his conviction, a strict Moslem, while deviation in details and rituals could not be grounds for excluding people from the Moslem community, and accusing them of *kufr*. In support of that he cited the following *hadith*: the first thing that Allah outlined in the first book was that He was Allah, that there was no God but Him, that His mercy surpassed His wrath, so that he who testified that there was no God but Allah, and that Mohammed was His slave and messenger would attain paradise. Ghazali extended salvation as a manifestation of divine mercy not only to all Moslems, including even those who did not observe the fasts and pray, but also many peoples of past times and the majority of the Christians of his time. He polemised with theologians who reduced the frame of divine mercy and who referred in so doing to the Moslem prophet's dictum that his community was divided into more than seventy parts (*firaq*), only one of which would be saved. Ghazali wrote that this was not the sole version of the *hadith*, although it was the one most common, because in the other version (as he claimed) it was said that only one of them would perish. Ghazali's statement about the permissibility of denying what was affirmed by the consensus (*ijma'*) of the Moslem community was a model of religious tolerance.

These ideas fully corresponded to the spirit of the liberal wing in Sufism, a doctrine that Ghazali made his choice after long spiritual quests. In his fundamental work *Vivification of Theology* devoted mainly to problems of Moslem law, he developed a number of aspects of Sufist doctrine, mainly of a practical character, about the legitimacy of *sama*, about *maqams*, and so on. In his treatise *Niche for Lights* (*Mishkat al-anwar*), his main Sufist work proper, he developed a quite strict system that represented a kind of 'metaphysics of light'.

Relying on Koranic verses in which God was described as 'the Light of the heavens and the earth'[25] he represented the universe in the form of a luminous hierarchy whose basis consisted of dark, material creatures and the pinnacle of pure light, God.

By light (*nur*), Ghazali said, was usually meant that which was seen by itself and by means of which the other was seen. Such was the perceptible light associated with the sun, moon, fire, luminaries, etc. The eye and intellect could also be included in the category of light since they, too, manifested things, but intellect could be likened to light more than the eye, because it not only manifested perceived things, but also itself, and was not limited, moreover, to the framework of space and time. He thus differentiated perceptible and spiritual light. He similarly distinguished between the lowest, corporeal, dark world (*alam ash-shahada*, sensuous world) and the highest, spiritual, light world (*alam al-malakut*, world of dominion). The first of these two parallel worlds, homomorphic with one another, was an image of the second, its shadow as it were. On the Sufist path the gnostic (*'arif*) ascended from sensuous lights to spiritual ones, later attaining the pinnacle of the latter, God, which was one and the true light. Everything else could only be characterised as light metaphorically. The gnostic comprehended the truth in this state that only God, the One, existed, and in contemplating the sole One, he did not see himself, and it seemed to him that he was united with God. But on returning to himself, after this state, similar to intoxication, he understood by his reason and intellect that it had not been union with God but only like unto it. This quasi-union was similar to the seeming union of the image in a mirror with the mirror itself, the colour of wine in the goblet with the colour of the goblet itself. The teaching of the Sufi's union with God and dissolution in Him (*fana'*) thus had to be understood, Ghazali stressed, in the sense of a psychological act, not an ontological one.

In Ghazali's work *kalam, falsafa*, and Sufism remained isolated from one another as it were. With their synthesis a new philosophical stage began in the development of Sufism, represented by ishraqism, and especially by wujudism.

NOTES TO CHAPTER 10

[1] Seemingly from *suf* (wool), the material from which the dress of ascetics, the hairshirt, was made.

[2] See: *The Holy Qur-an*, S. 46-30:

> They said, 'O our people!
> We have heard a Book
> Revealed after Moses,
> Confirming what came
> Before it: it guides (man)
> To the Truth and
> To a Straight Path'.

[3] *The Holy Qur-an:* SS. 57:4; 2:115; 58:7; 50:16.

[4] *Ibid.*, S. 5:59.

[5] M. R Smith. *Rabi'ah the Mystic* (Cambridge, 1925), pp 102-104.

[6] *Ibid.*

[7] *The Holy Qur-an*, S. 37:164.

[8] See: Badawi. *'Abd ar-Rahman. Shatahat as-sufiyya* (Wakalat al-matbu'at, Kuwait, 1978), pp 28, 84.

[9] See: *Diwan al-Hallaj* (Matba'at dar al-ma'arif, Baghdad, 1974), verses 282-284.

[10] *Ibid.*, verses 51-53.

[11] *Ibid.*, verse 364. See: Al-Qazwini. *Akhbarral-Hallaj.* L. Massignon, P. Kraus (Eds). (An Calme, Paris, 1936), pp 80-81.

[12] Al-Hallaj. *Kitab al-Tawasin.* Ed. L. Massignon (Paris, 1913), p 13.

[13] *Ibid.*, p 70.

[14] See: Al-Qazwini. *Op. cit.*, p 73.

[15] See: Ibn Hazm. *Kitab al-fisal*, Vol. 4, pp 188, 226.

[16] See: Ibn Tufayl. *Risalat Hayy Ibn Yaqzan* (Beirut, 1936).

[17] George F. Hourani. *Averroes on the Harmony of Religion and Philosophy* (Luzac & Co., London, 1961), pp 61-62.

[18] Al-Ghazali. *Al-Munkidh min al-Dalal* (Beirut, 1969), p 16.

[19] Al-Ghazali. *Iljam al- 'awamm 'aan 'ilm al-Kalam.* On the margins of al-Jili's *Al-Insan al-kamil* (Maktabat Subayh, Cairo, 1963), Vol. I, p 36.

[20] See: al-Ghazali. *Ihya' 'ulum ad-din*, Vol. I (Matba'at al-Babi al-Halabi, Cairo, 1939), p 100.

[21] See: as-Subki. *Tabaqat al-shafi 'iyya al-Kubra*, Vol. IV (Cairo, 1906), p 103.

[22] See: al-Ghazali. *Al-Munqidh min ad-dalal*, p 18.

[23] See: al-Ghazali. *Tahafut al-falasifa*, M. Bourgyes (Ed.) (Beirut, 1927), p 75.

[24] See: al-Ghazali. *Al-Mustasfa min 'ilm al-usul* (Cairo, 1356 A. H.), p 7.

[25] *The Holy Qur'an*, S. 37:164.

11

Ishraqism

Ishraqism, or the philosophy of *ishraq* (illumination), Illuminationism, comes from ideas about light as the first principle, which figures on the ontological plane as the substance of all that exists and on the epistemological as the principle of knowledge.

The foundations of the illuminative philosophy were laid by Shihab ad-Din as-Suhrawardi, nicknamed *'al-Maqtul'* (*The Killed*)[1], but better known as *Shaykh al-ishraq* (the head of ishraqism). Born in 1153 in the village of Suhraward (near the modern town of Zenjan in north-eastern Iran), he was educated in *fiqh* and *falsafa* in Maraga (in Old Iranian Azerbaijan) and Isfahan (in central Iran). Suhrawardi travelled around the cities of Iran, and spent several years in Anatolia (Asia Minor). His subsequent wanderings took him to the court of al-Malik az-Zahir, the ruler of the Syrian city of Aleppo, who had a high opinion of the young Sufi thinker and was close to him. But, after his proclamation of a number of ideas that had something in common with the doctrines of the Ismailite Batanites, he was thrown into prison where he died in 1191 at the age of 38.

Suhrawardi's ideas became widespread, especially in the east of the Moslem world. His outstanding successors and commentators on his works were his disciples Shams ad-Din ash-Shahrazuri (d. c. 1281), and Qutb ad-Din ash-Shirazi (d. 1311), in whose works two lines of Sufi thought, the Ishraqist and the Wujudist, were combined (he was a disciple of Sadr ad-Din al-Qunawi, the immediate successor of Ibn Arabi). There was a marked flowering of Ishraqism during the rule of the Safawid dynasty in Iran (1502-1736). Suhrawardi's teaching was developed by Mir Damad (d. 1631), the greatest representative of the Isfahan School, and his pupil, the celebrated philosopher Sadr ad-Din ash-Shirazi (known also as Mulla Sadra, d. 1641), who synthesised traditions stemming from Suhrawardi, Ibn Arabi, and Ibn Sina in his encyclopaedic work *Al-Asfar al-arba'a (The Four Journeys)*.

Suhrawardi's book *Hikmat al-ishraq (The Illuminative Philosophy)* became a kind of vademecum for Ishraqites. We take the main tenets of this philosophy from it.

A CRITIQUE OF CERTAIN PROPOSITIONS OF THE PERIPATETIC PHILOSOPHY

Suhrawardi presented his philosophical doctrine as a variety of universal, eternal wisdom (*al-hikma al-'atiqa, al-khamira al-azaliyya*), or *philosophia perennis*, that was one in its essence, although it took different forms among different peoples and at different times. This wisdom united the thinkers of Ancient India and Persia, Babylon and Egypt. In classical Greece it had been developed by Aristotle's predecessors, including Empedokles, Pythagoras, and especially Plato—the 'chief of the sages' and the 'head of the Illuminists'. Characteristic of this philosophy was a teaching based on the ontology of light about intuition (*zawq*), sudden insight (*kashf*), and illumination (*ishraq*) as the most reliable method of attaining truth. Along with the intuitive philosophy (*al-hikma az-zawqiyya*) there was another, the discursive philosophy (*al-hikma al-bahsiyya*) developed by Aristotle and his successors. And although intuition surpassed discursion, the true philosophy, the illuminative philosophy, combined both methods of cognition. Suhrawardi stressed the idea of the necessity of a synthesis of the two methods by the following hierarchical classification of the seekers of wisdom: sages who had succeeded in attaining intuitive wisdom (*ta'alluh*, theosophy), but had not acquired discursive knowledge (who included prophets and such Sufis as Bistami, Tustari, and Hallaj); sages who had deepened discursive knowledge but had not risen to the level of the intuitive (like Farabi and Ibn Sina); sages who had reached the pinnacles of both paths (Pythagoras, Plato, and Suhrawardi himself, according to him, belonged to this 'very rare' category).[2]

The ishraqite system set out in *Hikmat al-ishraq* was primarily a synthesis of Platonism and Aristotelianism. It subjected the Islamic Aristotelian philosophy (logic in the form in which it appeared with Ibn Sina, metaphysics, and natural philosophy) to a critical reworking mainly in the spirit of the teaching on the fundamental, ontological, and epistemological status of light, the world of which was identified with the Plato's world of ideas.

The first of the two parts that comprise *Hikmat al-ishraq* is devoted to logic. Its three sections, in essence, reproduce the Islamic Aristotelian teaching (on concepts; judgments and syllogisms; and sophisms). In his discussion of sophistic proofs Suhrawardi dwelt on the criticism of a number of its tenets that were relevant to nearly all its divisions—not only to logic but also to metaphysics, natural philosophy, psychology, etc.

He tried to simplify the Peripatetic logic, freeing it of its, in his opinion, superfluous formalism, and extremely detailed elaboration. In the classification of judgments, in particular, he tried everywhere to reduce the various types to one main one. Thus, when qualifying judgments as regards quality he reduced negative ones to affirmatives, as the main ones, because negation was a purely mental operation from his standpoint that took place only in the mind, unlike an affirmation or statement that took place in real actuality, outside the mind. When examining judgments from the aspect of quantity he ruled out particular ones as not presenting heuristic interest, and reduced partial ones to the universal, since, if a given part of objects was not determined, it could not serve as the object of examination. When analysing judgments as regards modality, he recognised only ones of necessity, to which he reduced judgments of possibility and impossibility, including possibility and impossibility in the predicate (for example, the statement 'Every person, possibly, is literate' was reduced to 'Every person is of necessity possibly literate'), and so on.[3]

Suhrawardi introduced more significant corrections into the doctrine of categories. In his view there were not enough grounds for counting the number of categories as precisely ten. In any case, he claimed, the shrewd Avicennians themselves had admitted that they had .no such grounds. He therefore proposed reducing the number of them to five, as follows: essence, movement, relation, quantity, and quality. He considered categories like 'where', 'when', possession, and position, variants of relation, and the categories action and affection to be variants of motion. The traditional doctrine of categories, he suggested, was not developed by Aristotle but by the Pythagorean Archytes.[4]

Suhrawardi denied the cognitive significance of definition in Peripatetic logic. According to Aristotle the definition of an object (for example, 'Man is a rational animal') was made through genus (animal) and specific difference (rationality). Such a definition, Suhrawardi considered, gave no new knowledge about the object and was in fact tautological, because (1) the species difference was unknown to whoever did not know the object being defined; (2) genus was a concept ever more unknown than the defined concept; and (3) where was the guarantee that there was no other distinguishing trait without which the given object could not be known? According to him simple non-composite things (for example, colour) were recognised through unmediated, direct contemplation and therefore did not have a definition, while composite things were defined by pointing out the totality of the simple things that could be joined together only in this thing.[5]

Among the tenets of Peripatetic metaphysics Suhrawardi criticised first of all the denial of Platonic ideas, rehabilitation of which was a characteristic feature of Illuminative philosophy. To justify their existence, he employed a dual kind of proof—intuitive and rational. Plato, Pythagoras, and other adherents of the doctrine of ideas, he affirmed, themselves contemplated ideas, 'bodiless lights', when liberating themselves from the eyes of the corporeal world and becoming absorbed in the world of intellect, which was also the world of pure light. Such a direct intuitive achieving of the idea was the most convincing proof, in his opinion, of the existence of these intelligibles. He also adduced rational proofs for the world of ideas. The main one consisted in affirming the idea as the guardian of genus. In the corporeal world, he said, genera did not admit of exceptions—only man originated from man, and only plants from plants.

In the same way, the wonderful flowers in the tail of a peacock were permanently passed from individual to individual, which could not happen from a mixture of the elements that the feathers were made up from as the Peripatetics thought. An eternally immutable world structure required each genus of corporeal creatures (including minerals, plants, animals, and people) to have an ideal, light essence (*zat ruhaniyya* or *zat nuraniyya*), which would have a completely independent existence in the ideal, intelligible world, or in the 'world of light'. This essence, or idea (*misal*), was the lord of the genus (*sahib an-naw', rabb an-naw'*), its mother (*umm*), etc. The idea protected the genus through the reproduction of innumerable individuals, thereby functioning as the generative model of the genus, its root (*asl*). The idea was the providence that cared for the individuals of the genus and provided it with all the necessary modi and qualities. In that sense the idea was a universal (*kull, kulli*), as it were, but not a logical universal that could be related equally as predicate to all the individuals. In relation to the idea an individual was as it were, a shadow, a statue (*sanam*), or a sign (*tilsam*).[6]

In his substantiation of the independent, intelligible existence of ideas Suhrawardi formulated one of the main structure-forming principles of Ishraqite ontology, viz., the rule of following the highest (*qa 'idat al-imkan al-ashraf*). According to this rule it was necessary, if there were a lower (*akhass*) thing, for a higher (*ashraf*) also to exist.[7] The existence of the less perfect—corporeal, partial, plural, moved, caused—was evidence of the existence of the more perfected—ideal, general, single, mover, causer. In particular the existence of a soul governing the body was deduced from the existence of the body; the existence of intellect free from matter was concluded from the existence of the soul; the existence of a generic idea was deduced from the intellects of individuals. But the structure of the world of ideas (or lights as they were characterised in Ishraqism) was not exhausted by generic ideas (which were called 'Platonic ideas' in the Ishraqite tradition). Below we shall see that they occupied only the middle rank in the light hierarchy.

Suhrawardi also answered a number of Peripatetic objections to the doctrine of ideas, bringing out the misunderstandings underlying, in his opinion, its unacceptability. These arose, for example, from such propositions as the following: ideas were corporeal (the idea of man, for example, correspondingly had arms, legs, etc.); an idea was a prototype that existed for the sake of its statue, like a mould for casting, because the idea itself in turn needed another idea, and so on *ad infinitum*; ideas were composite and could therefore disintegrate; there were ideas for qualities and accidents; ideas should be combined so as to construct a concrete thing (for example, in order to form a man it was necessary to permit a combination of many ideas which, brought together, constituted him—ideas of animality, rationality, bipedalism, and so on); since ideas had their own independent, intelligible being, they could not be involved in corresponding material individuals, and so on. In fact, as Suhrawardi stressed, ideas were absolutely bodiless, did not have arms and legs and noses; they were not prototypes in the sense indicated above, because the higher did not exist for the sake of the lower, so that there was no necessity to postulate a chain of ideas running to infinity; ideas were simple essences, although the members of a genus corresponding to them were always composite; ideas corresponded only to kinds of substance and not accidents; an idea, in spite of its simplicity and unqualifiedness, includes what was necessary in order to ensure wholeness of the individuals; the independent being of ideas did not prevent their being concerned with individuals—for no one else than Avicennians assert that the general (for example, humanity), which existed only in the mind and, in spite of its incorporeal being, corresponded to concrete corporeal things that were outside the mind (individuals).[8]

Suhrawardi also polemised against certain points in the doctrine of the Islamic Aristotelians, above all Avicenna, about the relation of essence (*mahiyya*) and existence (*wujud*). He considered mistaken the notion of existence as an accident additional to essence. In his view, the relation of existence to essence was not one of predicate to subject, otherwise it could be thought that essence could exist before existence or after it, or together with it, which was absurd. Outside the mind, in concrete, separate things, essence and existence were one and the same; they were even undifferentiable mentally.[9] And although such statements had nothing in common with essentialism, nevertheless Suhrawardi's doctrine that being, being as being in general, was only a mental concept (*ma 'na ma'qul* or *ma 'na i'tibari*) that could not exist outside the mind, was subsequently interpreted as affirmation of the primacy of essence (*asalat al-mahiyya*) in relation to existence. The conception of the primacy of essence ascribed to Suhrawardi became a subject of sharp disputes among Ishraqites of following generations. It was held in particular by Mir Damad, while Sadr ad-Din ash-Shirazi was a zealous opponent of it; he developed the illuminative philosophy from a standpoint of existentialism on the basis of a thesis of the primacy of being (*asalat al-wujud*).

An object of criticism in *Hikmat al-ishraq* was the Aristotelian hylemorphism, Aristotle's theory of matter (Gr. *hyle*, Arab. *hayula*) and form as the two constituent principles of a body. Matter, Suhrawardi considered, had been deduced by the Peripatetic from the necessity of a substratum for such opposites as continuity and discreteness. But they had in fact meant by continuousness extension or magnitude (*miqdar*), and the latter was capable of being discrete, and was not opposed to it, so that there was no necessity of looking for its special substratum, i.e. matter. And, furthermore, they did not treat magnitude as a constitutive principle of corporeality (because, in their opinion, bodies were similar as regards corporeality but differed as regards magnitude), and therefore considered matter the substratum for magnitude and form. In actual fact, as Suhrawardi suggested, a body was magnitude.[10] He illustrated the idea of the identity of corporeality and extension (magnitude), like Descartes later, by the example of a candle: when burning, a guttering candle passed through different states, yet its magnitude remained unchanged. But since a body was nothing else but a magnitude, the concept of matter as a constituent of a body became superfluous. He himself recognised matter only in the sense of the 'second matter' of the Peripatetic tradition (that is, as primary matter endowed with the form of corporeality). The third matter (second matter endowed with the forms of corresponding qualities—cold, dryness, etc.), and, furthermore, matter of higher orders, he positively rejected. In his opinion it was impossible to speak of a tree as material for a table, of brick and mortar as the matter for a house, and so on. It was correspondingly also impossible to speak of such forms as 'tableness', 'houseness', etc. In the illuminative natural philosophy hylemorphism gave way to the idea of body as a combination of extension and sensory qualities.

Finally, one of the elements of the divergence of Ishraqism from Peripatetic physics concerned the mechanism of visual perception. The Aristotelians explained vision by form's being separated from the object and becoming imprinted on the pupil of the eye, then passing into a *sensus communis*, and finally reaching the soul, which thereby saw the objects. Suhrawardi, criticising this explanation, pointed out the impossibility of such a large object as the sky getting into the tiny pupil. Along with it he rejected another conception competing with the Aristotelian. According to this other conception (which came from the Stoics, but was better known as the conception of the mathematicians) a cone-shaped beam of light went from the eye, with its apex in the pupil, and its base in the object seen. Against both conceptions he developed his own theory based on recognition of the illuminative character of sensory knowledge, like all knowledge. The eye could only see an illuminated object. When the object was opposite the eye the soul was filled with a special, spiritual light, and as a result of that act of illumination, the eye saw the object.[11]

After his criticism of these propositions and others of Peripatetic philosophy, Suhrawardi passed in the second part of his book to an exposition of the theory of light.

THE METAPHYSICS OF LIGHT

Light (*nur*) was the obvious reality. It did not respond to definition, and was not known by rational proof, because the unknown was defined and known through the known, and the unclear through the clear, but there was nothing in the world that could be clearer than light. Furthermore, it was light that made not only itself clear but also other things. Everything else was therefore determined through it. Light was divided into the accidental (*'arid*), i.e. light that was an accident or modus (*hay'a*) for another, and substantional (*qa'im*), i.e. light that existed of and in itself, and was not the modus for another. All varieties of sensible, physical light—the light of the sun, stars, fire, etc.,—belonged to its first form. Light of the second sort was characterised as incorporeal (*mujarrad*) or pure (*mahd*). Incorporeal light either depended on other light, to which it owed its existence, or was self-sufficient in its being. In a similar way everything that was not light by its nature was divided into dark accidence (*hay'a zulmaniyya*) and dark substance (*jawbar ghasiq*). Figure, magnitude, and all other qualities corresponding to the nine Aristotelian categories (except light) belonged to dark accidents. Darkness and murk was the absence of light. A body was capable of perceiving light and darkness, of being the bearer of light and dark accidents, so that it was the isthmus (*barzakh*) between light and darkness.

A body or *barzakh* was a dark substance in itself. Dark substances were dead, so that one could not give rise to another. It was impossible as well to raise the dark modi of bodies, and, all the more, light modi to dark substance, because the dark could not be the source of the light. A body and its dark and light modi required something else for its existence, which could be neither a dark substance nor a light or dark accident, which meant that it must be substantial or incorporeal light.

The series of incorporeal lights formed on the principle of dependence on one another could not continue to infinity. There was therefore a limiting light not dependent on anything, which was called the light of lights, the all-compassing light, holy light, the supreme light, etc. The light of lights—absolutely one, single, necessary being in itself—was the source of every other light, being, beauty, and perfection.[12] Its deputies (*khalifa*) were the sun in the heavens, fire, and the human rational soul on earth.

Suhrawardi reproduced the *falasifa*'s emanative scheme so as to describe the reverse ontological process, viz., the transition from the One, the light of lights, to the many and to sensuous things, modifying it in accordance with his theory of light-substance and archetypal ideas. In his ontological structuring of the universe absolute goodness and generosity continued to remain the cause of emanation and illumination, although, of course, illumination constituted the essence of the supreme first principle as light. Just as this was presented in the Islamic Aristotelians' emanationist scheme, the greatest light, or immediate, proximate light came from the light of lights (Suhrawardi compared it with the supreme archangel Bahman in Zoroastrianism). This first light was one because, according to the principle of emanation, only one could proceed from one. It was incorporeal, since a corporeal essence consisting of light and dark could not proceed from an essence absolutely not mixed with darkness. It differed from its source only in its degree of perfection and intensity. At the same time the first light, although actual and one, was potentially many. Two aspects or sides (*jihat*) could be distinguished in it that corresponded to possibility and necessity in the doctrine of the Islamic Peripatetics, i.e. poverty or dependence (*faqr*) and wealth or independence or self-sufficiency (*ghina*) could be distinguished in it. The first light was poor in itself, but was rich by virtue of its connection with the light of lights. When aware of its poverty and the darkness of its nature compared with the supreme light, it gave shade, the supreme *barzakh*, i.e. the outermost heavenly sphere, and with awareness of its wealth another, incorporeal light came from this light. Similarly, a third light and *barzakh*, i.e. the heavenly sphere, came from the second light. The process continued until the formation of the ninth sphere and the sublunary world.[13]

Departing from this preliminary scheme, which in fact coincided with the Peripatetic (only here the Peripatetics' intellects were renamed incorporeal lights), Suhrawardi developed his own scheme of emanation. In this scheme, outlined above, he was not satisfied with a limitation of the number of bodiless lights (intellects) corresponding to ten, as was the case with the Islamic Aristotelians. In his opinion, it was impossible to substantiate any number of lights in a given descending sequence by the analytical-discursive method. It was intuitively understood that the descent must stop at a certain light from which no further incorporeal light could originate. The number of such lights was therefore finite, though it was impossible to determine it exactly. By refusing to limit the number of lights to ten, Suhrawardi did not, at the same time, take up the point of the localisation of *barzakhs*, which, by the logic of the emanational scheme, should be accompanied with corresponding lights. It remained only to suppose that they were somewhere beyond the ten heavenly spheres by which the structure of the superlunary world was completed in the Ptolemaic-Aristotelian cosmology.

This scheme satisfied Suhrawardi even less because, from his standpoint, it was unable to explain the multiplicity in the heavenly spheres, where the number of heavenly bodies was numberless. Each star in the sphere of fixed stars, for instance, required the existence of a corresponding aspect or side in the intelligence of this sphere, but the Peripatetics saw only two (possibility and necessity). It was therefore necessary, for there to be yet other aspects and other principles of multiplicity that would yield an innumerable number of dominant lights (*anwar qahira*). For that purpose Suhrawardi amended the original emanational scheme, or rather included it in a more complicated scheme.

The new scheme was constructed as follows.[14] A first light proceeded from the light of lights, a second from the first, and so on. There was thus a finite number of basic lights. Each of them emitted a ray to the next lower light and received a ray from the light of lights, both directly and by way of other, superior lights. The second light thus received two rays; viz. one directly from the light of lights, and a second through the first light; the third light received four rays, one directly from the light of lights, one from the first light, and also the two received by the second light. The fourth light received eight rays, and so on. As many sides or aspects could thus be distinguished in each light as the lights it received. In that sense this capacity could be identified with reflection. In addition to a capacity for reflection, each light had a capacity to contemplate (*mushahada*) superior lights. By turning to the higher light and contemplating it, the lower received a ray from it. As a result of these two processes—reflection and contemplation—a vast number of incorporeal lights was formed that constituted an ordered, causal sequence. Suhrawardi called this multitude the longitudinal order or series (*tabaqa tuliyya*). The lights of this order were characterised as the supreme dominant principles (*al-qawahir al-usul al-a'lun*), matters (*ummahat*) in respect of all other lights. They can be compared with the ideas of ideas, or idea-numbers of the late Plato. Suhrawardi himself linked them in another work of his *Al-Mutarahat*[15] with the Pythagoreans' doctrine of numbers as the principles of the existent.

In order to construct a second emanational series Suhrawardi endowed the higher lights with new ontological dimensions, or degrees of freedom. Besides poverty and wealth, two forces (faculties) (usually associated with Empedokles' love and enmity), viz. love (*'ishq, mahabba*), which characterised the relation of the lower light to the higher, and domination (*qahr*), which expressed the relation of the higher to the lower. Domination and love permeated everything that existed. The final and highest object of love, moreover, was the light of lights, which was also absolute beauty.[16]

Between the different degrees of freedom associated with reflection, contemplation, domination, love, wealth and poverty, there were endless multitudes of possible combinations. The combinations in which the aspect of poverty was involved formed bodies that included the sphere of the fixed stars. Other combinations, in which the aspects of wealth, domination, and love were involved, gave rise to a whole host of lights that were the sovereigns or lords of the genera considered above, or Platonic ideas. As analogues of idea-lights, Suhrawardi introduced corresponding personages of Zoroastrian angelology: *khurdad* for water, *urdibihisht* for fire, *shahrwar* for minerals, *murdad* for plants, and so on.[17]

In contrast to lights of the longitudinal series, lights of the second emanationist series were equal (*mutakafi'a*), in that they did not give rise to one another, and were not connected to each other by any causal relations. At the same time they were of different levels; one generic idea could be subordinate to another in certain relations, but not in all (similarly to how, for example, animals were subordinate to the human genus). Suhrawardi called the great number of these lights the latitudinal order or series (*tabaqa 'ardiyya*). Latitudinal lights, like longitudinal ones, were also characterised as dominant, although, in comparison with the latter, they were lower and derivative, *furu'*. Both types of dominant lights were incorporeal, did not exist in bodies, and did not directly control them.

Finally, ruling lights (*anwar mudabbira, anwar mutasarifa*) proceeded from the lords of genera; for them Suhrawardi borrowed the terms *ispahbad* (war chief) from the vocabulary of Old Iranian chivalry. It was through the ruling lights that the dominant lights effected genera. They moved the heavenly spheres and directly ruled all genera of earthly creatures (minerals, plants, animals, and people). The ruling lights, although also incorporeal, were nevertheless linked with the bodies of the members of the corresponding genus. The highest of these lights on earth was the rational human soul.

There was not an impassible gulf between the two categories of lights (the dominant and the ruling). They passed continuously into one another. Among the dominant lights of the lowest level, in particular, there were those that were almost ruling ones (they included, for example, the generic lights that were accompanied with the primary elements—air, water, earth). These lights did not even have ruling lights that could be intermediaries between them and their statues. Close to them were the dominant lights that corresponded to inanimate objects. Among the human ruling lights, in turn, there were those that were almost rational,[18] i.e. dominant lights.

In his treatise *Credo of the Philosophers* (*Itiqad al-khukama*) Suhrawardi described the ontological structure of the universe in the form of a hierarchy of three worlds: the world of the divine (*'alam al-jabarut*) or the world of reason; the world of dominion (*'alam al-malakut*) or the world of souls, cosmic and human; and the world of possession (*'alam al-mulk*) or the world of bodies.[19] In his book *The Philosophy of Illumination* (*Hikmat al-ishraq*) the following corresponded to these levels: dominant lights, ruling lights, and *barzakh*, i.e. the totality of celestial and earthly bodies.[20] But here, for the first time, there was a new, fourth dimension of being, viz., the world of suspended ideas (*'alam al-muthul al-mu'allaqa*). It was also characterised as *barzakh*;

intermediate between the mentally comprehended world of pure lights and the world of physical bodies. Suspended ideas did not belong to Platonic ideas because the latter were pure lights that were constantly (*thabita*) in the realm of the intelligible light. At the same time they were not embodied in fully sensual, spatial images; they were flat, as it were, lacking a third dimension of depth, because of which they were like a reflection in a mirror, hanging as it were without a substratum or place. Suspended ideas were bodiless ghosts; they included various imaginable pictures (including those that arose during dreams, illness, fear, etc.). This *mundus imaginabilis* connected with the human soul's imaginative faculty played a significant role in Suhrawardi's eschatology, which completed his natural philosophy.

PHYSICS AND PSYCHOLOGY

Suhrawardi revised the Peripatetic physics on the illuminative basis characteristic for him. Following the Aristotelians he defined time as the measure of movement. Time, together with movement, had neither beginning nor end. Emanation also had no end, and together with it the world, too, as a continuous timeless emanation of the light of lights. The world was also perennial and had no beginning in time. Eternity was primarily an attribute of celestial bodies, together with their intelligences and souls.

The primary elements that constituted the bodies of the sublunary world were also eternal. True, there were only three main elements in Suhrawardi's doctrine, viz., air, water, and earth; fire was only very hot air. At the same time fire rose high above the other elements by its heat and especially by its light. It was a deputy or substitute of the Supreme Light on earth, the 'younger brother' and assistant of its other deputy, man's rational soul. Fire illumined the world of bodies, the rational soul—the world of souls. Fire, like any light served worship, which found its reflection in the constellations of the ancient Persians' cult of fire.[21]

Suhrawardi's simple elements were qualified in the Peripatetic manner as combinations of various qualities (air of the warm and moist; water of the cold and moist;

earth of the cold and dry), but he characterised them from the standpoint of capacity to let in light. Simple bodies were divided into three types: (1) the shielding and dense (*hajiz*), which did not at all let in light (this was earth); (2) the thin or fine, transparent (*latif*), which enabled light to penetrate fully (this was air); (3) the moderate (*muqtasid*), which let in light to various degrees intermediate between these limits (this was water). Compound bodies belonged to one of these three types according to the predominance of one or other element in them. Crystal, for example, was moderate by virtue of the prevalence of water in it.[22]

The primary elements passed into one another. Water was converted into air, air into earth, earth into air, air into fire.

In his explanation of these natural processes, and of other natural phenomena, Suhrawardi everywhere stressed the role of light, both intelligible and sensible, as a first principle. If one sought one would find nothing that affected the near and the far except light, he said.[23] The effect of light was realised directly through its two modi, i.e. movement and heat. The movements of the celestial luminaries, and man's actions, were governed by corresponding ruling lights. The fall of a stone, the falling of rain, the evaporation of water, a flash of lightning, peals of thunder, etc., happened through the effect of heat, brought about by the rays of stars. In the sublunary world the two forms of movement, viz., mechanical (spatial displacement) and physical (qualitative changes) usually accompanied one another, and sometimes gave rise to one another. Psychic phenomena were also connected with heat and motion: since Love and Dominion arose in light, and movement and heat were its determinations, heat had a relation to attraction, lust, and anger, and they happened all together (as Suhrawardi considered) through movement.[24]

Like the Islamic Aristotelians Suhrawardi explained the hierarchy of the three kingdoms of nature (minerals, plants, and animals) by the degree of proportionality of the mixture of elements forming their bodies. He also argued about the different faculties of the vegetable, animal, and human soul in a Peripatetic manner. He identified man's rational soul with the ruling light of the human body. This light, bodiless principle ruled dark bodies by means of a certain third one midway between dark and light, the bodily and the bodiless. The animal soul, which penetrated the whole body was such an intermediary; it was present in any part of the body when the light from the rational soul reached it. This soul was also the carrier of various bodily faculties—motor, perceptive, etc. In addition to the five external faculties, the faculty of perception possessed internal ones (*sensus communis*, representative, imaginative, estimative, and retentive). But unlike the Islamic Aristotelians, in particular Ibn Sina, Suhrawardi considered the representative, imaginative, and estimative faculties not to be independent, but only different functions of one and the same faculty. He differed, too, in his treatment of the mechanism of memory and recall. Forms conveyed to the representative faculty by the external senses, were not preserved in it, otherwise the rational soul could reproduce them at any moment, but man, it happened, forgot one form or the other. It was a mistake, as well, according to him, to say that the retentive faculty was a place where images perceived by the imaginative and estimative faculties were stored. In fact, he considered, these forms and images were retained and preserved in the world of the highest lights from which they were drawn by means of the rational soul.[25]

The rational soul, the ruling light of the human body, did not precede the body in time. After death, when the candle of the animal soul went out, it preserved its existence. Ishraqites, Suhrawardi wrote, admitted the transmigration of souls from one body to another, as Plato, Pythagoras, and other sages had taught. But in the final account the rational soul had to be liberated from the darkness of corporeality, and be elevated to the world of light where it would continue its eternal existence among other intelligible lights, being, as it were, in the All-embracing Light.[26]

Union with the light of lights, which was the highest degree of blessedness, was the lot of only a few, gnostic theosophists whose souls had attained perfection in both the theoretical and the practical fields. As for people who succeeded in only one form of wisdom, or only partially in both, they constituted a category of the moderately happy souls who crossed after death to the world of the imagination, the field of suspended ideas mentioned above. The souls of people of the lowest category also went there, those of people of complete unhappiness, and of absolute ignorance. For them dark, black ideas were foreordained, corresponding to hellish torments. The souls of the moderately happy enjoyed light, white ideas that represented paradisal joys. In the world of imagination these souls could reproduce everything they thought fit: tasty food, pleasant melodies, beautiful houris, etc. But the soul of the gnostic, passing through this world, did not stop in it (because the happiness there was only imaginary) but were raised higher to the world of light, the Supreme Light.[27]

As will be seen, Suhrawardi's treatment of the question of the immortality of the soul and the other worldly life, of fundamental importance for religion, coincided in fact with that of Ibn Sina in particular. Both regarded heaven and hell only as symbols to be interpreted variously in accordance with the addressee. For most people they should be interpreted in the exclusively sensual sense that was necessary in order to maintain a virtuous life. Gnostics considered that the immortality of the soul could only be intellectual. Hell and paradise were only symbols for them of ignorance and gnosis, of remoteness from the light of lights and closeness to it.

Suhrawardi took the idea of the ascent of the idea of an individual light to the light of lights, set out in an eschatological context, further in connection with arguments about the 'state' (*ahwal*) of the gnostic who followed the Sufi path.[28] On this road he distinguished fifteen illumination stages, after passing through which the Sufi reached the world of the highest lights. The substantial unity of man's soul-light with all other pure lights, and in the end with the light of lights, followed from the fundamental postulate from which he started when constructing the Ishraqite ontology, namely that the difference between the intelligible incorporeal lights was a difference of degree of perfection, i.e. of intensity, but not of kind, so that incorporeal lights did not differ from one another in essence (*fi-l-haqiqa*).[29] This essential unity was manifested in an emanation of lights from the highest light and in their return to it. The light of lights thus figured as the principle of the unity of the world and embodied this unity to the maximum.

When speaking the language of religion Suhrawardi called the light of lights God. A pantheistic treatment of God made itself felt in all his works in which the relation of God and the World was discussed. It is to be seen quite clearly, in particular, in the short treatise *The Song of the Griffin* (*Safir-i simurgh*) in which he distinguished five stages in the achievement of unity (*tawhid*), each of which was characterised by a definite formula: (1) *la ilaha illa Allah* (there is no God but Allah)—the stage reached by the mass of Moslems who denied any polytheism; (2) *la huwa illa huwa* (there is no other He, only He): at this higher stage any otherness was denied—everything else came from God; (3) *la anta illa anta* (there is no other Thee than Thee)—all objects to which the subject addresses himself are dissolved in God; (4) *la ana illa ana* (there is no other I but only the (divine) I)—at this stage the subject himself is dissolved in the divine subject and becomes divine; (5) the stage of absolute unity corresponding to the Koranic verse 'Everything/(That exists) will perish/Except His own Face'[30]—everything disappears in the Subject, which still reminds him of his opposition to the object, and in that sense he ceases to be a subject; on the background of the Light of Lights every other light is extinguished as it were, including the light of the Subject.

The immanent tendency of unspeculative Sufism and the orientation to mystical, psychological closeness to God were developed in Suhrawardi's illuminationism in the form of philosophical pantheism. A pantheistic intension is even more openly characteristic of the members of the other leading school of speculative Sufism—the Wujudists.

NOTES TO CHAPTER 11

[1] The sobriquet 'al-Maqtul' was usually used to distinguish the founder of Ishraqism from the other Shihab ad-Din as-Suhrawardi (d. 1234), also a famous Sufi, who was the chief in his day of the Baghdad Sufis.

[2] H. Corbin (Ed.) *Oeuvres philosophiques et mystiques de Shihabeddin Yahya Sohrawardi*. (Institut franco-iranien, Teheran-Paris, 1952), pp 11-13, 305-306.

[3] *Ibid.*, pp 25-31.

[4] *Ibid.*, p 74. See also: As-Suhrawardi. *Opera metaphysica et mystica.*

Ed. H. Corbin (Maarif Matbaasi, Istanbul, 1945), Vol. I, pp 11, 12, 284.

[5] *Ibid.*, pp 18-21, 73-74.

[6] *Ibid.*, p 74; see also: as-Suhrawardi.

[7] *Ibid.*, pp 92, 143-144, 162.

[8] *Ibid.*, p 154.

[9] *Ibid.*, pp 158-160.

[10] *Ibid.*, pp 64-67; see also: as-Suhrawardi. *Opera metaphysica,* pp 22-23.

[11] *Ibid.*, p 79.

[12] *Ibid.*, pp 97-100, 134-135.

[13] *Ibid.*, pp 107-121.

[14] *Ibid.*, pp 125-133; 138-139.

[15] *Ibid.*, pp 140-145.

[16] As-Suhrawardi. *Opera metaphysica*, pp 452-453.

[17] Idem. *Oeuvres philosophiques et mystiques*, pp 135-137.

[18] *Ibid.*, pp 157-158.

[19] *Ibid.*, p 166.

[20] *Ibid.*, p 270.

[21] *Ibid.*, p 232.

[22] *Ibid.*, pp 172, 179-181, 193.

[23] *Ibid.*, pp 187-188.

[24] *Ibid.*, p 196.

[25] *Ibid.*, pp 204-210.

[26] *Ibid.*, pp 223, 255.

[27] *Ibid.*, p 243.

[28] *Ibid.*, pp 252 *et seq.*

[29] *Ibid.*, pp 119-120.

[30] *The Holy Qur-an*, S. 45:24.

12

Wujudism

The Sufist synthesis of probably all the foregoing currents and schools of Islamic philosophical thought was realised in Wujudism (Ar. *wujud*, being). It is characteristic of Wujudites to consider the thesis of being as a single reality identically related to all entities, including God, in which is seen an expression of the pantheistic identity of God and the World. The founder of this trend in Sufist philosophy the Spanish-Arab Abu Bakr Muhammad Ibn 'Arabi (or Ibn al-'Arabi)[1] was born in the town of Murcia in the south-east of Spain. He got his education in Seville, one of the major centres of Moslem culture in Spain. Having entered on the Sufist path he moved about the towns of al-Andaluz and Northern Africa in search of mentors and teachers. In 1200 he began his long wanderings in the lands of the Moslem East. Having received an invitation from Al-Muzaffar, the ruler of Damascus, Ibn 'Arabi settled there, and stayed until his death in 1240.

Ibn 'Arabi left a truly vast literary legacy. He wrote more than 800 major and minor works. The main one, his magnum opus, is *The Meccan Revelations* (*Al-Futuhut al-makkiyya*) which is a kind of spiritual diary of the last three decades of his life. It has been characterised as the Bible of esoterism in Islam, an encyclopaedia of Sufism, and so on. The book consists of four volumes and comprises around 3000 large pages. Another of his books, rather smaller in volume but more popular among Sufis was *The Bezels of Wisdom* (*Fusus al-hikam*), written in Damascus in 1229. *The Bezels* was translated into the other main languages of the Moslem world; and more than 150 commentaries have been written on it.[2]

A special *tariqa* in Sufism, *arabiiya* (better known as *akbariyya*) is associated with the name of Ibn 'Arabi. The other name comes from the title bestowed on him by his followers—*Ash-shaykh al-akbar* (The Greatest Sheykh, or *Doctor maximus*).[3] His ideas were developed by Sadr ad-Din al-Qunawi (d. 1274), Afif ad-Din at-Tilmisani (d. 1291), Ibn Sab'in (d. 1272), Abd ar-Razzaq al-Qashani (d. c. 1330), Da'ud al-Qayasari (d. 1350), Sayyd Haydar al-Amuli (fourteenth century), Abd al-Karim al-Jili (d. 1426), Abd al-Ghani an-Nabulsi (d. 1731), and others. A synthesis of the doctrines of Ibn 'Arabi and Suhrawardi was made, as noted above, by such philosophers as Qutb ad-Din ash-Shirazi. Spread of Ibn Arabi's doctrine in the Persian-speaking world was encouraged by the eminent Sufi poets and thinkers Jalal ad-Din ar-Rumi (d. 1273, his divan *Mathnawi* was called *Al-Futuhat* by the Persians), Fakhr ad-Din al-Iraqi (d. 1289), Mahmud ash-Shabistari (d. 1320), Abd ar-Rahman al-Jami (d. 1492), and others. A sympathiser and friend of the Doctor maximus was Ibn al-Farid, the greatest Arab poet of Sufism. It is said that he replied to Ibn 'Arabi's request for permission to write an interpretation (*sharh*) of his poem *Ta'iyya* that the latter's *Al-Futuhat* was its interpretation.

The esoterism in the work of Ibn 'Arabi and his followers, due primarily to fears of a negative reactions from dogmatic theologians and the broad public to their cherished, secret ideas, was manifested inter alia in the deliberately complicated, elliptical language of their treatises, in the wealth of symbols, parables, allegories, and mythologems. Besides concepts taken from *kalam* and *falsafa*, the Wujudists developed their own specific terminology and compiled special dictionaries for it. In their works the philosophical is often interwoven into the tissue of the mythological, and the thought is veiled by understatement, which the reader is constantly warned about by the authors themselves when they demand of him an ability to decipher the allegories and symbols, to read between the lines, and so on. In that respect Ibn 'Arabi's statement at the beginning of *Al-Futuhat al-maqqiya* is indicative, in which he said, apropos of pronouncements of the true doctrine, that he had not expounded it anywhere separately, so that it remained unclear, and that he had scattered it throughout the various chapters of his book so that he whom God had given the capacity to understand it would comprehend it and distinguish it from others.[4]

The main conceptions of Wujudism that present historical and philosophical interest are set out below: viz., the unity of being, new creation, epiphanies, perfected man, and noumenal essences. In our exposition we mainly follow the works of Ibn 'Arabi.

THE UNITY OF BEING

The philosophy of the Wujudists is above all one of absolute monism. The keystone of their structures is the doctrine of unity, of the absolute unity (*wahda mutlaqa*) of everything that exists. Behind any plurality they saw the unity encompassing it; they saw in any thing a manifestation of the One that linked it with other things, forming them into an organic whole. All being was one, Ibn 'Arabi wrote, and there was nothing in the world except the supreme One (*wahdat al-wahdat*) or the One that was manifested in the many, the 'One-many' (*al-wahid al-khathir*).[5]

The monistic intension of Sufism is clearly conveyed by the verses of Jalal ad-Din ar-Rumi, which Hegel cited as a model of the contemplation of the One chaacteristic of the pantheisms of the Moslem East *'in His finest purity and sublimity'*:

I saw but One through all heaven's starry spaces gleaming:
I saw but One in all sea billows wildly streaming.
I looked into the heart, a waste of worlds, a sea,—
I saw a thousand dreams,—yet One amid all dreaming,
And earth, air, water, fire when thy decree is given.
There is no living heart but beats unfailingly.
In the one song of praise to thee, from earth and heaven.[6]

The immediate model for the philosophers of Sufism for constructing the unity of the world was the doctrine of Ash'arite *kalam* about substances and accidents, from which it followed that the universe was substantially one, since the atom-substances it was constituted of were identical with one another; plurality was due to the various accidents of a single substance. The Wujudists identified the Ash'arites' single substance with being (*wujud*) and concrete things with the forms (*suwar*) of being.[7] Being was not simply one but single. It applied equally to all things. Thus, when one said 'the tree exists' or 'God exists', one had one and the same being in mind. That was the conception of unity of being, or rather singleness of being (*wandat al-wujud*) that constituted the kernel of the philosophy of Wujudism. By taking being as the unity-forming principle of the universe the Sufis' absolute monism took the form of an ontic monism.

From the angle of protagonists of *wahdat al-wujud* being was not a mental predicate or an abstract idea. It was the most self-evident reality since it was embodied in all things. At the same time being was the most hidden and unknown, because it encompassed all things so that nothing different from it could be found by which it could be limited or defined. Being could only be comprehended by intuition.

Not only was all that existed one in the doctrine of Ibn 'Arabi and his followers, but each thing was one. The universal unity existed in each tiniest element of reality. The one-being was manifested in each separate thing because it, too, was one and possessed identity, and individuality.[8] All things were connected together through the One. But that was not simply a horizontal, extensive connection. The philosophers of Sufism put forward a principle of All in all (*kullu shay' fi kulli shay'*) in the spirit of panenthenism).[9] In developing it they came to views resembling Leibnizian monadology. Each limited, separate thing in the world, in their opinion, reflected infinite universality and the whole totality of being: like mirrors facing each other, each of them included all the rest, and any part of the world was itself the whole world.[10] In that aspect the world was infinite and matter inexhaustible 'in depth'. In each atom, Shabistari wrote, there were hundreds of radiant suns, and in every drop of water hundreds of pure oceans.[11]

From the standpoint of the Wujudites the singly reality had two mentally differentiable aspects that were usually designated by the terms *haqq* (truth) and *khalq* (creature). The difference between *haqq* and *khalq* was customarily described as a duality of the one and the many, of the real (noumenal, intelligible) and the phenomenal, of the inner (*batin*) and external (*zahir*), of the substantial and the accidental, of pure being and concrete being, of the infinite and the finite, the eternal and the temporal, the necessary and the contingent, the independent and the dependent, the absolute and the relative, and so on. But there was no place in this philosophy for an undialectical opposition of these aspects of the single reality. *Haqq* and *khalq* like logical correlatives, did not exist the one without the other. Furthermore they passed dialectically into one another and contained each other. *Haqq* was *khalq* and *khalq* was *haqq*, Ibn Arabi stressed.[12] Each single thing had both aspects, both dimensions, and combined the two opposites. The dialectical principle of the coincidence of opposites (*coincidentia oppositorum*) was manifested in that, a principle that permeates the whole Sufist picture of the universe.

In order to describe the relationship of the single and the many, of noumenal unity and phenomal plurality, and *haqq* and *khalq*, Ibn 'Arabi and his followers resorted to analogies and metaphors of various kind:[13] mathematical—unity and the infinite series of natural numbers (each of which is formed by addition of unity and itself), the centre of a circle and its points (which are the ends of radii running from the centre), a point and a line (as the development of a point); physical—light and shade, a thing and its reflection in various mirrors, a rainbow and its various colours; organic—soul and body, a body and its parts; logical—genus and individual, universality and particularity, the subject of a sentence and its various predicates. These analogies, although meant to further understanding of the relation between the plurality of the concrete things of the empirical world and the highest unity that encompassed them, were very far (as the Wujudites stressed) from an adequate depiction of this relationship. It was also impossible to understand unity as a unity of plurality by means of analytical-rational, discursive thinking. It was possible only by way of intuition.

The Wujudites interpreted the corresponding concepts of the Moslem religion in terms of their ontology. They identified God with the One Reality, with the world whole; the divine essence (*zat*) with pure being, with being as such (*haqq*); the divine attributes (life, knowledge, will, power, etc.) with the universal concretisings of pure being; the countless names of God with individual concretisings of being with individual things of the phenomenal world. Their ontic monism thus already appeared as pantheism.

Wujudites differentiated between the traditional theological monism (*tawhid uluhi*) preached to the multitude (*'awamm*) and ontological monism (*tawhid wujudi*) which was held by the elect (*khawass*) and primarily by Sufi-gnostics. For the formula of theological monism—'There is no God but Allah'—they substituted 'There is no being but Allah'.[14] The first formula denied plurality of gods, affirming the one and only God; the second denied plurality of being, affirming the one and only being. Monotheism was replaced in Wujudism by mono-ontism. The names characteristic of its philosophers—*wujudiyya* or ontists and *ahl al-wahda* or defenders of unity—are connected with that.

The opponents of Sufi pantheism had already seen, in the thesis of the 'unity of being', an orientation to identifying God and the World. It followed from this thesis (as one of these opponents Ibn Taymiyya noted) that the being of the World was the being of God.[15] But Ibn 'Arabi and his followers did not limit themselves to identifying God and the universe only as regards their being. It is sufficient to compare two of his statements—that there was nothing among the existing that would permit the opposing of attributes, except the World in the aspect of its unity, and that there was nothing that would admit the ascription of opposites to it, except Allah[16]—in order to see that he meant nothing else by God than the World taken in its wholeness. His statements in which God is described as 'the all' (*'ayn al-kull*), 'the whole universe' (*al-kawn kullih*), 'all things' (*kull shay'*), etc.,[17] are also direct evidence of the identification of God and the world whole. Ibn Taymiyya thus had every basis for accusing the Wujudites of claiming in accordance with their theory, that God was identical (*'ayn*) to the heavens and earth, that concrete things (*ka'inat*) were parts of God, like waves in relation to the sea,[18] and so on.

According to Ibn Taymiyya, Wujudites considered that anything was God.[19] To illustrate this he cited a legend about Ibn Sabin who decided to quit the land of Islam and settle in India since the people there worshipped everything, including plants and animals. Wujudist philosophers' identification of everything existent found reflection in a celebrated formulation: '*al-kull huwa*' (Persian, *hama ust*)—'everything is He'. We must stress, however, that here it is a matter of the integrality of things and not of their aggregate or totality (in the sense of each of them). A thing, taken in its limited, isolated, individual existence could not be characterised as divine; otherwise one would fall into incarnationism or polytheism. Concrete, individual things were divine only to the extent to which they appeared as parts of the universal whole. Warning against a superficial interpretation of the formula mentioned above, Ibn 'Arabi explained that just as one did not say of a man's hand or other organ that it was the man, one could not say of individual things (*a'yan*) that they were God; only being as a whole was God.[20]

The Sufist God, which symbolised the unity of the universe and its essence (*zat*) was identified with unity-forming principle, i.e. being, or rather with pure, absolute being. God was being, and things were forms of being, Ibn 'Arabi said.[21] In that aspect God was substance (*'ayn*), the matter (*hayula*) of all things.[22] A logical consequence of the identification of God with being-substance was acosmism; from the Wujudist standpoint separate essences and single things lacked reality and substantiality in themselves; they existed only as part of the world whole, as modi of a single substance.

The divine essence was, in itself, absolute indeterminacy, pure being lacking any qualities and relations. The divine attributes (*sifat*) or names (*asma'*) were universal concretisations of this being. They were relations (*nisab, idafat*) of the divine essence, of pure being, to the single things of the phenomenal world. But while they were different from one another they were at the same time connected with one another through the divine essence, so that each name in its own way expressed all the rest.[23] A finite number (usually seven) of 'main names' was distinguished among the divine names, to which all the others gave way. The list of these may vary from one Sufist system to another, but as a rule it includes names connected with such attributes as life, knowledge, will, and power.

Sufist philosophers interpreted the relation of the 'main names' of God to the corresponding properties of individual things in a pantheistic spirit as the relation of universals to their particulars. The life of God, for example, symbolised the integrality of all the lives of individual creatures. In that context Wujudites developed their interpretation of the ontological status of universals (*umur kulliyya*), which, Ibn 'Arabi said, were intelligible essences that had no individual, independent existence outside the mind that did not depend on corresponding particularities.[24]

The endowing of God with the names and attributes of all single things was something quite new in the Wujudites' answer to the traditional theological problem of the divine attributes and names. All existing things were attributes of God. Every name in the world appertained in fact precisely to God. The universe thus represented a kind of book of the divine names: the whole world was the beautiful names and highest attributes of God.[25] Ibn 'Arabi and his followers developed their solution of the old *tanzih-tashbih* dilemma in the context of this understanding of the relation of God and the World. As we noted in the section above on *kalam*, by *tashbih* and *tanzih* was usually understood God's likeness and unlikeness to created things, in particular the anthropomorphisation of God and his de-anthropomorphisation, but this dilemma was resolved as a rule by recognising, only one of the two alternatives, i.e. either *tanzih* or *tashbih*. In Sufist pantheism the antinomy of *tashbih* and *tanzih* is not so much a theological problem as an ontological, philosophical one, which is given a dialectical solution that affirms the indissoluble union and unity of the two opposites. The relation of God and the World; of the divine essence and concrete things, was similar to the relation of the whole and parts, of essence and modi. This latter relation contained two aspects, viz., transcendentness and immanentness, *tanzih* and *tashbih*, or (as Ibn 'Arabi put it) *itlaq* (absoluteness) and *taqyid* (limitedness). The divine, the world whole, was transcendental to all its creations and their properties because it was free in itself of their single, limited characteristics; in that sense the divine essence was also transcendent, pure being. At the same time God was immanent in creations since the genera and species of the properties of single things could be attributed to Him as a whole; the divine essence or being as such was immanent in creations because they were limitations of being, modi of it. When treating God and the divine essence as *haqq* and the created world *khalq*, Ibn 'Arabi stressed that *haqq*, taken in the aspect of *tanzih* was *khalq* taken in the aspect of *tashbih*. The true Sufi, gnostic, therefore simultaneously affirmed both the transcendentalness and the immanentness of God, *tashbih* in *tanzih* and *tanzih* in *tashbih*.[26]

Not only were transcendentalness and immanentness united in God; all opposites coincided in Him. In the opinion of Wujudites God could not be known otherwise than as the combination of opposites in Him.[27] The idea was illustrated by Jili's poetic images in which God is described as existent and non-existent, mortal and eternal; sensuous and imaginable, the snake and the snake-charmer; the connected and disconnected, the wine and the wine-waiter; or as the ignorance that is knowledge, the war that is peace, the injustice that is justice.[28]

The combination of opposites, in the opinion of Wujudites, was a reason why logical discursive thinking guided by the law of the excluded middle could not know God, the whole. Only intuition was capable of comprehending God as a unity of opposites.

The One-Being, to which the word 'God' corresponded in the language of theology, was the absolute good and the supreme beauty. A hadith zealously quoted by Sufis says that God is beautiful and loves beauty. The world, constructed in the image and likeness of God, was also beautiful; it was the most beautiful of all possible worlds. Not only was the world as a whole beautiful, but also every existent. Everything was beautiful in itself. Beauty, and also good, were objective, and immanent in things. Ugliness, like evil, was subjective and accidental, and dependent on conventions, circumstances, and so on.

God-the-Beautiful was the object of mystic love and closeness. He was present in everything beautiful and was manifested in everything loved. The sole living beauty, developing in the countless forms of the world, was embodied with special clarity in woman. Contemplation of God in woman was the greatest and fullest contemplation.[29]

The erotology of Ibn 'Arabi and his followers distinguished three types of love—physical (*tabi'i*), spiritual (*ruhani*), and divine (*ilahi*)[30]. Physical love embraced a diversity of physiological, physical, and mechanical attractions inherent in all people, phenomena, and objects of nature. In a certain sense it was egoistic; in it the subject strove to satisfy his desires, irrespective of the existence of a corresponding striving in the object of love. In it the subject and object were still different, still far from the forming of a completed unity and indistinguishable whole. Spiritual love, however, presupposed that the lover sacrificed himself and his desires for the sake of the beloved. This was the love of gnostics, the highest aim of which was realisation of the essential unity of the subject and object of love. In contrast to the profane, who loved single things and concrete forms of being, gnostics loved the whole that encompassed these single things, loved the sole essence manifested in all these concrete forms.

The two types of love (physical and spiritual) constituted two aspects of the highest kind of love, the divine. Divine love was God's love of himself. This love of the One was the source of every other love. It was manifested in two forms: as God's anguish for the World and as the World's anguish for God. The anguish of the creations for God was the cause of their return to their source, to the whole, to the single being, like the return of rivers to the ocean. This homesickness was at once the anguish of the whole for its parts and the desire to be manifested in forms of things, to return to itself. People's love of God or of some certain thing was nothing else than God's indirect love of himself; he thus loved himself in us, and in things in general. God's love of creations was also manifested as a striving of the divine essence for self-manifestation, and for self-development in the countless forms of concrete being. Wujudites cited a well-known hadith in confirmation of the idea of love as the cosmological principle: God was a hidden treasure and desired (*ahbabtu*, literally 'took a fancy') to be knowable; he therefore created the world. This creation, however, was not a simultaneous act, but represented a continuous process, called in the Sufi literature the new, regenerating creation (*khalq jadid*).[31]

NEW CREATION

There is no place in Ibn 'Arabi's doctrine for theistic creationism. In a pantheistic spirit he denied the priority of God to creations in time, and stressed that there was no time when there was no world.[32] The world was not only eternal, and had no beginning in time, but also had no end. Furthermore, he resolutely rejected creation from absolute not-being, affirming, following the Mu'tazilites, that the creation of things was only their transition from one ontological state to another, from intelligible existence to phenomenal, from being in possibility to being in actuality. That transition was vigorously determined by the very nature of things, so that there was no free choice for God, i.e. He was deprived of will, an indispensable attribute of the theistic God.[33]

Furthermore, in contrast to the religious tradition that God created the world once over a definite interval of time (six days), Ibn 'Arabi spoke of a permanent, continuous creation outside time. God was always creating, as (in his opinion) the words of the Koran 'Every day in (new) splendour Doth he (shine)!'[34] witnessed.[35] In that context day had to be understood (so he considered) in the sense of an atom of time (*zaman fard*). The world was dynamic: there was no rest in it at all because it was constantly passing from one state to another.[36] The constant renewing of the world was a consequency of God's continuous self-manifestation in the forms of concrete things and, in reality, identical to this self-manifestation.

The Sufist conception of new creation was a further development of the Ash'arites' doctrine of the continuous renewing (creation) of accidents. Ibn 'Arabi considered this theory inconsistent, since it did not extend to substance (bodies), although, on closer examination, it was seen that the latter was an aggregate of accidents in the Ash'arite interpretation. Therefore, not only the traditional accidents but also so-called substances had to be regarded as accidents that were constantly being renewed. The substratum of all these changes was the one and only substance, identical with the Absolute Being. Along with the tenet of the continuous renewal of accidents Ibn 'Arabi borrowed from the Mutakallims the doctrine of the atomic structure of bodies, extending it also to time. In his system the smallest body consisted of eight atoms: two constituted a line, two lines a plane, two planes a body. Time, too, was atomic. The least time, the single time (*zaman fard*) was the minimum interval of time during which a renewing of the world—its new creation—took place. At the same time new creation was continuous in the sense that there was no time interval between two consecutive acts of creation; the moment of disappearance of a thing was the moment of the appearance of its like.[37]

In order to construct identity in the world of continuous becoming, Ibn 'Arabi invoked unity on the part of essence, which could be called a relation of coessentiality. This relation in turn was manifested in a dual kind of relation—horisontal and vertical. The horizontal was a time link between constantly created things. That which at first glance was one and the same thing in reality was not one and the same thing in two consecutive moments of time but two similar (*shabih*) things. In spite of that, however, the thing did not lose its original unity, but preserved its identity, thanks to which all the new and similar changes constantly occurring in it were eternally predetermined by its own essence, its noumenal essence. Essential unity also underlay the vertical link between things. Such, for example, was the self-identity of God variously manifested in people's different beliefs and notions.[38] And in general all concretely existing things were infinitely varied modi of the one and only substance, various manifestations of one and the same essence and, in the final count, were reduced to the One.

There were two trends in the continuous flow of becoming that supplemented one another. On the one hand new creation meant that God continuously manifested himself in an infinite number of forms of possible things. This was an ontological descent (*tanazzul*) of the Absolute from the state of the one and necessary to that of the many and possible. But at the same time the process of continuous descent itself, regarded from the standpoint of the possible, ends in a continuous process of ontological ascent (*taraqqi da'im*). In that sense every thing continuously ascended to the Absolute by the latter's same descent. As an illustration of the unity of ascent and descent they usually cited the example of a vertical circumference on a sphere rotating on the spot around a horizontal axis.

More concretely the great circle of being was pictured as follows. From the upper pole, to the One went a descending arc that passed through the First Intellect, the world soul, to the earth (or rather the four physical elements—earth, water, air, and fire) the opposite pole. From the latter an arc ascended going through minerals, plants, and animals, and ending in man, the analogue of the First Intellect. The gradation of being on the ascending arc had the sense not only of vertical, ontological hierarchism but also of horizontal, temporal evolutionism. First minerals were formed on earth, then plants, and then man. The culmination of each of these kingdoms, moreover, was simultaneously the beginning of the next. So the culmination of minerals, and simultaneously the beginning of plants was the truffle, the culmination of plants and at the same time the beginning of animals was the palm, the culmination of animals and at the same time the beginning of man was the ape.[39]

Ibn 'Arabi interpreted the traditional Sufist concepts—*fana'* (disappearance) and *baqa'* (preservation)—in the light of the conception of new creation. In his theory these concepts lost their original sense connected with the Sufi's psychological-mystical union with God. *Fana'* and *baqa'* acquired an ontological meaning in Wujudism and were related to any concrete thing and any form of phenomenal being. They were two aspects of 'new creation' that supplemented one another. New creation was the continuous transition of a thing from one form to another, and that meant its disappearance together with the old form and its preservation in the new. *Fana'* and *baqa'* thus expressed the involution and evolution of the single substance occurring at each moment of time and in each act of new creation.

Fana' and *baqa'*, furthermore, could be treated as characteristics of a concrete thing in two of its different relations or dimensions: the former in the aspect of its belonging to phenomenal being or *khalq*, and the latter from the standpoint of its involvement in noumenal being, in *haqq*. A thing therefore did not disappear altogether. The Koranic verse 'Everything (That exists) will perish Except His own Face',[40] in which the pronoun 'His' was usually referred by the theologists to God, Ibn 'Arabi and his followers interpreted quite differently, relating it to the thing itself.[41] A thing could disappear and perish only in the sense of acquiring another form, and of decomposing in the parts constituting it, i.e. the atoms; its substances that constituted its atoms, however, were preserved, and were never annihilated. Things thus never ceased to exist; the world would exist without end. *Dunya* and *akhira*, which meant in the religious tradition, respectively, the this-worldly and the other-worldly life, were employed in Sufist philosophy as simple designations of the two aspects of the new creation, i.e. *baqa'* and *fana'*. In that sense Ibn 'Arabi wrote that the end would not be reached in the world; *akhira* was constantly being realised in the world.[42]

The dynamic picture of the universe drawn by the Wujudite philosophers was connected with their specific perception of time. The now (*aan*) in which all existents were newly created was not a simple point of physical time, nor simply the end of the past and beginning of the future, but an eternal instant (*aan da'im*) which included the infinite past (*azal*), the present (*hadir*), and the infinite future (*abad*). *Aan* was the Sufi analogue of Meister Eckhart's *ewiges nun* or the *nunc aeternitatis* of Nicholas of Cusa. At each moment of time man's state (*hal*), or rather the state of Sufi who realised his link with the whole, was determined by that moment or *waqt* (time) or *aan*. Wujudites began to interpret the traditional sayings—*as-sufi ibn waqtih* (the Sufi is the son of his time) and *as-sufi bi-hikmi waqtih* (the Sufi is subordinated to time), and *as-sufiyya 'ubbad al-waqt* (Sufis are admirers of time) in this spirit.

The idea of *aan* as a moment of time identical with eternity reflected a metaphysical atomism of a kind that patently or tacitly permeated all the structures of the defenders of absolute monism. By analogy with a numerical series that started at unity, or with a straight line that was formed of points, Ibn 'Arabi and other Wujudites regarded physical plurality as a development of metaphysical unity, and the phenomenal world as a development of a certain original state.

All things and events, past, present, and future, were latent or programmed, as it were, in that state. New creation meant in fact only an explication of this implicit state. These states of implicity and explicity are usually designated in the Wujudite Sufist literature by the terms *kumun* (latency) and *zuhur* (revealableness), which we have met above when making our acquaintance with the philosophy of Nazzam of the Mu'tazilite school of *kalam*, or *ratq* (unitedness, literally 'sewn' or 'stitched') and *fatq* (disconnectedness, literally unpicked), employed in the Koran to expound the corresponding cosmological constructions: '... the heavens and the earth were joined together (*ratqan*) ... before we clove them asunder (*fafataqnahuma*)'.[43] A more concrete idea of the development of the latent Absolute, and of the transition of *deus implicitus* into *deus explicitus* is given by the various schemes of epiphany.

EPIPHANY

Epiphany was the timeless process in which the Absolute (the One, pure Being) manifested itself in increasingly concrete forms. This was the transition from the intelligible one to the phenomenal many, from absolute being to concrete being, from the unknowable Absolute to the known. In Sufist literature it is described in terms of 'self-manifestation' (*tajalli*), 'self-determination', or 'self-concretisation' (*ta'ayyun*), 'descension' (*tanazzul*), 'emanations' (*fayd*), etc.

Epiphany was an endless process and the gradations of being generated by it were countless. But these different gradations could be reduced to a few main, universal levels. The most common schemes of these levels are two, the three-membered and the five-membered.

In the three-membered scheme the universe was ontologically structured through a differentiation of two phases of the epiphany of the Absolute—the holy emanation (*fayd aqdas*) and the sacred emanation (*fayd muqaddas*), which are also called the essential self-manifestation (*tajalli zati*) and the existential self-manifestation (*tajalli wujudi*). The first type corresponds to the transition from the state of 'being hidden treasure' to the state of 'being knowable' in the *hadith* mentioned above. This was the stage of the coming into being of self-consciousness in the Absolute when it was manifested in forms of the all-possible existents that came into being (or were generated) in its consciousness. The Absolute became known of itself as potentially embodied in a countless plurality of concrete things. With holy emanation pure, unconcretised being became potentially concretised; absolute unity (*ahadiyya*), in which there was not even a shadow of plurality, passed into potential plurality, into plural unity (*wahidiyya*). The first self-manifestation of the Absolute generated noumenal essence, which were the self-manifesting form of the divine names—of the ontological potency included in the Absolute. Those *eidos*-archetypes were recipients (*qawabil*) thirsting for concrete embodiment.

With sacred emanation God created the world, the Absolute manifested itself in countless diverse forms of phenomenal being. This was an ontological process of the transformation of potential things into actual things, noumenal essences into phenomenal objects.

In addition to these two types of emanation Ibn 'Arabi taught about constant emanation (*fayd da'im*), which upheld the existence of concrete things of the sensuous world. This last type coincided with the new creation about which we spoke above.

The epiphanic scheme considered here corresponds to the series: the One, the One-many, many. The five-element scheme was a further concretisation in fact of the three-member one, namely in the direction of elaboration of the centre member. It is usually described by the terms 'strata' (*maratib*), 'levels' (*hadarat*), 'concretisations' (*ta'ayyunat*), 'worlds' (*'awalim*). For Ibn 'Arabi himself this scheme had not yet crystallised as a separate construction but, beginning with his closest follower Qunawi, it began to be one of the main modes of the structuring of being.

When putting forward the theory of five levels (*al-hadarat al-khami*), Qunawi developed it in the terms customary for the theological tradition, in which two main levels of being were distinguished, viz., the visible (*shahada*) and invisible (*ghayb*). This fundamental dichotomy was represented as that of 'God and the World' in which the World figures as what was different from God. But in addition, Qunawi said, there was a third reality that was neither fully visible nor wholly invisible, but a sort of combination of the two. It was man, who was special creation of God's, created 'in his image' (*'ala suratih*). Consequently, it proved on closer examination that there were three fundamental strata of being, not two: invisible (God), visible (the World), and man. Furthermore, two modes (not-created and created) could be distinguished within the concretisation of the first of these strata. The uncreated invisible related to God, and to divine knowledge of all things, the object of which was noumenal essence. As for the created invisible, it was an indirect link between God and visibles, and was called the world of souls in which souls were synomyms of intellects and angels. The visible could similarly be divided into two kinds: (a) visible in all respects, i.e., the physical or sensual world, and (b) the relatively invisible, in spite of its belonging to the visible; this was the world of imagination (*khayal*) or images (*mithal*). In that way five ontological levels were obtained: that of the latent (*batin*), clear (*zahir*); a middle level between these two that synthesised both sides, viz, perfected man; on the right of the middle level, between it and divine invisibles, was the level of souls, and on the left, between the middle level and the visible world, the world of images.

Qunawi deduced these levels as well from the very nature of being, adducing them in accordance with the teaching of the Islamic Aristotelians on the modality of being, i.e. of necessary being, possible being, and impossible being. On the one hand, he wrote, there was necessary being, which also corresponded to the first level, and on the other hand, possible things. The latter, in turn, were divisible into three kinds: (1) those that were still determined by the properties of necessary being, i.e. unity and unconcretisation, i.e. souls; (2) those that were wholly determined by the properties of possible being, i.e. plurality and manifestations (these were concrete things of the phenomenal world); (3) those in which the properties were well balanced between the necessary and the possible, i.e. images. Perfect man, finally, embodied the forms of all things, possessing the properties of all levels from pure necessity to pure possibility, and uniting them in one whole.[45]

The five levels of being could be represented in a descending and an ascending order. One could pass, for instance, from top to bottom, beginning with noumenal essences and tracing the character of their being at each lower level. At the stage of divine knowledge these essences were non-existents (*ma'dumat*), although they were known to God from eternity. At the level of souls they existed as enlightened (*nurani*) realities, lying close to God yet nevertheless separate from Him. At the next level, that of imagination, essences were still enlightened but less so. They were now far from simple and uncompounded. In this world of images souls were already ready for manifestation in sensory forms. Finally the lowest level of the manifestation of being was reached, that of the sensual world, sombre (*zulmani*) and complex (*murakkab*). Perfect man embodied all four levels of being. An ordinary man also embodied all four levels in the sense, for example, that they were clearly reflected in him. His reality, or idea, i.e. his divine level, was his noumenal essence. His spirit corresponded to the world of spirits, his soul to that of images, his body to the sensual world. As a unity he reflected perfect man.[46]

The conception of five levels was modified in two main directions in its further development. On the one hand, the state of unconcretisation or absolute unity (*ahadiyya*), which was not considered a separate level (*hadrat*) according to Qunawi, began with Said ad-Din al-Farghani (d.c. 1300) to be included in the epiphanic scheme (which thus became a six-element one) as its first level. On the other hand, perfect man often ceased to be assigned to separate levels although his synthetic status remained as before. As a result the following five-member scheme of epiphany became the most common one in the Sufist literature:[47]

(1) the level of absolute unity (*ahadiyya*) or divine essence (*zat*);

(2) the level of plural unity (*wahidiyya*) or the divine names and attributes, the level of divinity (*uluhiyya*); this included the world of noumenal essences as objects correlative with the divine names;

(3) the level of divine actions (*af'al*) or suzerainty

(*rububiyya*); this was the world of incorporeal, formless intellects and souls that symbolised the universal ruling forces of the cosmos (*mudabbirat kulliyya*);

(4) the level of images (*mithal*)—the world of typical forms in which epiphany became corporeal as it were, and determinations or individuations acquired figure and outline, though only ideally (*mithaliyya*) and not materially;

(5) the level of the sensual and visible (*hadarat al-hiss wa-sh-shahada*), the world of dominion (*alam al-mulk*), i.e. phenomenal reality.

The following series of Arabic terms was also employed to designate these levels or worlds: *hahut, lahut, jabarut, malakut, nasut*. All these levels were united in the 'perfect man', the doctrine of which occupied a prominent place in the philosophical constructs of the thinkers of Sufism.

THE PERFECT MAN

The term 'perfect man' (*al-insan al-kamil*) was first introduced into Sufist and generally Islamic philosophy by Ibn 'Arabi. There are several dozen synonyms for it in his works that bring out its content in different aspects.[48] They all witness that perfection does not have a moral-ethical sense in this context, as might seem at first glance, but an ontological and epistemological one. The doctrine of the perfect man is in fact the conception of the Logos (*kalima*) in which three main aspects can be distinguished: (1) ontological, (2) cosmological, and (3) gnostic-prophetological.

In the first, ontological (metaphysical) aspect perfect man, also called universal man (*insan kulli*), is the embracing Logos (*kalima jami'a*). This Logos functions in turn as a synonym of universal reality (*al-haqiqa al-kulliyya*), or the reality of realities, idea of ideas (*haqiqat al-haqa'iq*).

Ibn 'Arabi differentiated three categories of being: (1) that which existed *per se* and was the source of all things, i.e. absolute being (*wujud mutlaq*) or God; (2) that which existed through absolute being and without the latter's being converted into not-being, i.e. limited being (*wujud muqayyad*), or the phenomenal world; (3) that which united in itself both of the foregoing forms of being, i.e. universal reality, or the reality of realities.

This third reality was not characterised either as existent or non-existent, eternal or temporal. It was eternal together with the eternal, and temporal together with the temporal. Universal reality did not precede the world in time, but only logically. It could be said of this reality that it was God or the World, but it could also be said that it was not such. It was present in each existent though it was not divisible and was not a whole, and had no parts. In that respect the third reality was like such realities and universals as the woodiness present in a plank or a table, an ink-stand, a coffin, or other wooden things; or as the squareness present in a sheet of paper, a wall, and everything square; or the whiteness present in clothes, flour, paint, etc.

All such universal, intelligible realities formed a hierarchy (according to their degree of commonness), the summit of which was the reality of realities, the most common genus (*al-jins al-a'amm*) or *summum genus (jins al-ajnas)*. A reality lying lower in this hierarchy could be regarded as a definite combination of more general and more universal realities. Thus, from the uniting of two realities—figure and quantity—a triangular figure or a rectangular one, etc., was obtained. Each individual thing in the world could be regarded in exactly the same way as a combination of universal realities. An ink-stand, for example, consisted of woodiness, rectangularity, squareness, etc. In that sense universal reality was the root, the prime matter of all things.[49]

As *summum genus* the universal reality embraced the ten Aristotelian categories.[50] In that connection Ibn 'Arabi dwelt on the question of the ontological status of the categories and their epistemological relation to individual concrete things from the standpoint of the mechanism of human knowledge. In his opinion universal reality, as an aggregate of categories, was intelligible in the mind but did not exist *in concreto*; it was in existents as reality (*haqiqa*) but without division, increase, or decrease. Its existence stemmed from the appearance of concrete existents, both eternal and temporal. If there were no concrete existents it (reality) would not be mentally comprehended but if there were no reality, the realities (*haqa'iq*) of existents would not be comprehensible. Its existence therefore depended on the existence of individuals, but differentiated knowledge of individuals depended on knowledge of it, because whoever did not know it did not distinguish existents, since he could say, for example, that the inanimate, the angel, and the eternal, were the same thing, since he did not know realities (*haqa'iq*) and did not know that existents differed from one another.[51] It followed from this that categories, as the highest genera of being, could not have an apriori existence; in their being they came after the being of concrete things; man cognised inductively, and later deductively.

In universal reality the whole plurality of the phenomenal universe was in an undifferentiated and potential state. It was an aggregate of intelligible and archetypal ideas of the world of becoming. In that sense it corresponded to divine knowledge, or rather to the content of that knowledge. At the same time universal reality was intelligible matter, the undifferentiated object of the Absolute's knowledge and self-knowledge. Furthermore, it was the first epiphany of the Absolute and in that quality coincided with the First Intelligence. But perfection (completion) was actual in perfect man but only potential in the First Intelligence.[52] The difference concerned in this expression was in fact the difference between the potential state of the Logos, the perfect man, or universal reality, and its actual embodiment in the form of the Cosmos.

In its second, cosmological aspect, perfect man was Cosmos with man in it. As the embodiment of perfect man, or universal reality Cosmos was perfect and beautiful, and represented the best of possible worlds. Cosmos attained highest perfection in its development in the human race. Man was the most perfect of all the creatures in the world, since he was *Imago Dei*. In that he was perfect in himself because he was a perfect conspectus (*mukhtasar*) or copy (*nuskha*) of the Universe that in itself synthesised all the things that existed in the universe from the four physical elements to minerals, plants, and animals. But all these things were present in man only in a universal way, as reality (*haqa'iq*) and not in their concrete individual form. Man was thus a microcosmos, while Cosmos itself was the great man (*insan kabir*).[53]

Nature reached self-knowledge in man; the Absolute knew itself only in him. Ibn 'Arabi expressed this in metaphorical, theological language as follows: God (*al-haqq*) burned with desire to see his innumerable beautiful names or, one may say, to see these incarnated in all-encompassing reality (*kawn*), through which he wanted to disclose his secret (*sirr*) for himself, for contemplation of self through self is not contemplation of self in something other, as is a mirror, because it shows things in a way such that they could not see themselves without it and without appearing in it. And God created the World, which proved to be like an inanimate body, and therefore resembled an unpolished mirror. And a necessity arose for a polishing of the mirror, and so Adam became the polishing of the mirror and the spirit of the body.[54]

Each existing thing thus reflected one separate name of God, one separate aspect of the Absolute. Taken together in the form of the universe they constituted a certain whole that corresponded to the Absolute's awareness of itself. But without man the universe was not a true unity, God's polished mirror. Only man synthesised in himself all the forms of the divine epiphanies; only he was aware of the wholeness of the universe and its unity.

On the cosmological level every man as representative of the human race, the most perfect epiphany of the Absolute-One, was the perfect man. And every man could potentially be aware of the unity of the universe and his place in the world whole or, in the language of the mystics, be ecstatically joined with the True. But that was actually the lot of only a certain category of people, viz. prophets, saints, and gnostics.

The Logos, perfect man, in its gnostic-prophetological aspect was primarily the idea of Muhammed (*haqiqa muhammadiyya*), by which was understood the principle of any revelation and inspiration, the source of any esoteric knowledge. In Ibn 'Arabi's doctrine any thing was the word (*kalima*) of God, so that the whole World was the 'great Koran'. The image of the World as the 'great Koran' enabled him to throw a bridge from the universal Logos to the Prophet Mohammed. The latter, he considered, was also the Koran, because there was no difference between what could be seen in the Koran and what could be seen in the messenger of God.[55] With such an indentification, however, Mohammed ceased to be a concrete person, the prophet of the Moslem religion, and was converted into a generic concept, into the idea of Mohammed, of which all true prophets—not only Mohammed, but also Moses, Abraham, Jesus, and many others—were different manifestations. To illustrate that conception Sufi thinkers resorted to the image of a circle of circles. Prophecy, Qaysari wrote, was a circle, every point of the circumference of which represented in turn a centre of its circle. The last of the prophet-messengers, Mohammed, corresponded to the universal circle, and the rest of the prophets to points on the circumference.[56] That conception constituted the core of Ibn 'Arabi's book *The Bezels of Wisdom*, in which the nature of God-the Absolute was described in its manifestation through various prophets. Each of the book's 27 chapters was linked with the word or logos (*kalima*) of a prophet who embodied a separate divine attribute. And like the different stones that constituted a single ring, each prophet was a universal aspect of the divine wisdom, or Logos, or idea of Mohammed. Mohammed (in the sense of the idea of Mohammed), furthermore, was the Pole (*qutb*) or rather the Pole of Poles (*gutb al-aqtab*), since each of the prophets and saints was also a Pole.

In the teaching of Ibn 'Arabi and most other Sufis sanctity (*wilaya*) was understood as gnosis, as esoteric (secret) knowledge (*ma'rifa*) and not piety and pietism, although these characteristics were present in it as accidents. A *wali*, i.e. a man who had attained the degree of *wilaya*, was a gnostic who was aware of his true relation to the One, and had realised his unity with the Absolute. The gnostic achieved that unity as a result of the four journeys (*asfar arba'a*): (1) removal of the veil of (phenomenal) plurality from the face of unity; (2) removal of the veil of unity from the face of (intelligible) plurality; (3) achievement of undualistic unity (*'ayn al-jam'*); (4) contemplation of unity in plurality and plurality in unity.[57] The identification with the divinity achieved by completing the third journey corresponded, according to Sufis, to the well-known *hadith* in which it was said in the name of God that His slave would win to closeness with Him by good deeds (*nawafi*), until He loved him, and when He loved him he would be the hearing by which He heard, the eye by which He saw, the hand by which He struck, the foot by which He walked. In that state the gnostic achieved full unity with all things, including the rhythm of the cosmos. Then, said Qaysari, the gnostic was liberated from religious obligations, prayers, fasts, etc.[58]

The traditional triad of initiation—*shari'a, tariqa, haqiqa*—corresponded, in Sufist epistemology, to the three degrees of knowledge: *'ilm al-yaqin* (certitude based on tradition—in particular religious tradition—or logical proof); *'ayn al-yaqin* (certitude founded on personal observation); *haqq al-yaqin* (certitude founded on union of the subject of knowledge with the object, and full disappearance in it). These stages were often illustrated by the following examples: 'it has been explained and demonstrated to me that fire burns although I have not yet seen or experienced thus'; 'I have seen how fire burns'; 'I myself burned and so was convinced of the capacity of fire to burn'. At the first of these levels a Sufi acquired knowledge of the One-God on the basis of religious tradition or theological argumentation that proved the existence of the One, God, starting from the properties of the many, of creation; this was contemplation of *khalq* in *haqq*. In the second stage Sufis joined personal contemplation of the One to this knowledge; this was contemplation of *haqq* in *khalq*. At the third stage he contemplated *haqq* without *khalq*, the One in itself. This was the stage of identification with Truth.

The last, highest stage of knowledge corresponded to the degree of gnostic, i.e. *wilaya*. The esoteric knowledge linked with it was identical with divine knowledge, the self-knowledge of the Absolute. *Wilaya* was therefore regarded as a more general category and higher degree compared with prophecy (*nubuwwa*) and apostleship (*risala*). *Wilaya* was permanent, while prophecy and apostleship were temporary. And although Ibn 'Arabi affirmed that his thesis of the superiority of the *wali* over the prophet and the apostle should be understood only in the sense that Mohammed, as a gnostic, was more perfect than as an apostle, the bearer of divine law, his opponents saw in this thesis, not without grounds, an elevation of the *wali* (to which status Sufi-gnostics themselves pretended) above all prophets and apostles. For Ibn 'Arabi had said that prophets got their knowledge indirectly, through the mediation of an archangel, but a *wali* drew knowledge directly—from the same source of divine knowledge as the archangel. The *wali*-gnostic, who thus received revelation in a similar way to how it was sent down from heaven to the Prophet was called by Ibn 'Arabi the successor, the deputy (*khalif*) of Mohammed. But since what this deputy received from God, he wrote, was identical with what the Prophet received, he esoterically (*bi-lisan al-kashf*) spoke of him as the deputy of God, but exoterically (*bi-lisan az-zahir*) as the deputy of the Prophet. Therefore, when death came to the Prophet, he had not named anyone as his deputy, because he knew there were people in the community who would receive the status of deputy directly from God.[59]

Sufi-gnostics, capable of receiving revelation (*kashf, fath*) were people of general prophecy (*nubuwwat amma*) in contrast to which partial prophecy (*nubuwwat al-ikhtisas*) or legislative prophecy (*nubuwwat al-tashri'*) belonged only to prophets. The former did not possess the legislative (law-giving) faculty, including that of being able to establish a new law (*shari'a*) different from the Mohammedan. At the same time there was another aspect, in which this category of Sufis stood above the Prophet. For they obtained their knowledge of Islamic law from the same source from which it had been sent down to him, so that their judgment on any matter of the law coincided with the precepts of the Mohammedan religion or corresponded to the decisions of God, when He Himself made them.[60] In that sense Sufi-gnostics were not only deputies of the Prophet but also his heirs (*warasa*), and were even participants in his apostolic mission.

Such a notion of the status of a Sufi-gnostic opened up wide possibilities for overcoming the obduracy of religious dogmatism. The gnostic had the right, in particular, to quash or amend any thesis of the law established through the interpretation, *ijtihad*, of one religious authority or another. He could, moreover, refuse to recognise the authenticity of any *hadith* that underlay an interpretation, *ijtihad*, on a certain question, if the error of this *ijtihad* had been revealed to him. In substantiating the constant renewing of religious and ethnical norms, Ibn 'Arabi, like his rationalist predecessors, employed sayings ascribed to the Moslem Prophet: about the permanent modification of religion—at the beginning of each century God sent this community one who renewed its religion; about the sanctioning and encouragement of *ijtihad*—if a learned man (*hakim*) was mistaken when putting forward his interpretation (*ijtihad*), he would be rewarded all the same, but when he proved right, he would be doubly rewarded; about the optional character of the competence of religious authorities, including the Prophet himself, in the lay sphere—people knew the affairs of the life of this world better than Prophets and so on.[61]

But, in contrast to the notion of the *wali*-saint as a miracle-worker characteristic of non-philosophical Sufism, Ibn 'Arabi in fact denied him the faculty of interfering in the order of things, stressing the strict determinacy of the processes and events taking place in the world. The determinist view of the universe was substantiated primarily in the context of the conception of noumenal essences, which Ibn Taymiyya called the first of Ibn 'Arabi's two main seditious theses (together with the doctrine of the unity of being).[62]

NOUMENAL ESSENCES

The conception of noumenal essences (*'ayan thabita*, shortened to *'ayan*, sing. *'ayn*), was, as Ibn Taymiyya noted, a further development of the Mu'tazilites' doctrine of the non-existents (*ma'adumat*). And Ibn 'Arabi himself pointed out the similarity of the two doctrines.[63] Following the Mu'tazilites he distinguished two kinds of being of things: (1) intelligible, noumenal being, that he called *thubut* (permanence, immobility), and (2) the sensual, phenomenal being—*wujud*. Every thing of the phenomenal world had its double in the noumenal world, or *'ayn* (pl. *'ayan*), essence, which, when clothed in being, became the given thing.

'Ayan possessed an exclusively intelligible nature and had no sensual, space-time existence. In that aspect they resembled Platonic ideas. But in contrast to the latter they were not universal but were partial, single entities, particulars. *'Ayan* were non-existents (*ma'dumat*) in the sense that they possessed purely intelligible being and had no sensual, phenomenal existence. They were dark, not yet illuminated by the light of (phenomenal) being. From that aspect the dichotomy of *thubut-wujud* was

similar to the duality of essence-existence (*mahiyya-wujud*) or the potentiality-actuality (*quwwa-fi'l*) of the Islamic Aristotelians. '*Ayan* were, furthermore, infinite in number, co-eternal with the Absolute, and had no beginning or end in time. They corresponded to the first phase of the three-part scheme of epiphany, viz. the phase of holy emanation.

Ibn 'Arabi, like the Mu'tazilites before him with their doctrine of the non-existent, resolved one of the main problems for Moslem theology—the character of divine creation—by means of the conception of noumenal essences. He decisively rejected creation *ex nihilo* and the idea that nothing was and that later a thing arose from nothing (*la shay*').[64] According to Jili, Ibn 'Arabi affirmed that God did not create things from not-being (*'adam*), but only brought them out from intelligible being (*wujud 'ilmi*) into concrete being (*wujud 'ayni*).[65] Commenting on the verse of the Koran that was often interpreted in favour of creation from nothing,

> '...I did
> Indeed create thee before
> When thou hadst been nothing,'[66]

(*wa lam taku shayya*, literally 'thou wast not a thing), Ibn 'Arabi said that it was not a matter here of 'nothing' as absolute not-being; only phenomenal thingness (*shay 'iyyat al-wujud*) was denied here but not noumenal thingness (*shay'iyyat ath-thubut*).[67] The thing was only translated from one ontological status to another. In support of his interpretation he cited another Koranic verse:

> Verily, when he intends
> A thing (*shay*'), His command is,
> 'Be' (*kun*), and it is' (*fayakun*).[68]

In this verse, so he considered, the fact of a definite existence of the thing even before its appearance in the phenomenal world was indicated, otherwise God could not direct his command 'Be!' to it. And, as in the case of the conception of the not-existent among the Mu'tazilites, the opponents of the doctrine of noumenal essences treated this doctrine as a factual assertion of the eternity of the world in the sense of the eternity of its matter.[69]

Ibn 'Arabi spoke in places of noumenal essences in a way close to the conception of exemplarism. Concrete things of phenomenal being, he considered, were created by God in the image of *'ayan,* which were forms (*suwar*), eidoses, that existed permanently in divine knowledge. *'Ayan* were intelligible archetypes, paradigms of phenomenal entities. But the fundamental difference of this doctrine from theistic exemplarism was that *'ayan,* which constituted the objects of divine knowledge, were primary in relation to this knowledge because they determined it; knowledge, he emphasised, was secondary in relation to the object of knowledge, and the object of knowledge was God (i.e. *'ayn*) and His creation.[70] It followed from this theory, which Ibn Taymiyya declared to be clear blasphemy, that *'ayan* did not depend as essences on God but God himself depended on them in His knowledge of them, because He drew knowledge of them only from them, just as man drew knowledge of sensual things from his perception of these things, which, though perceived, did not depend on the perceiver.[71]

In giving noumenal essences absolute determinant power, Ibn 'Arabi deprived God of other attributes as well that were characteristic of Him in the context of the religious-theistic world outlook. The role of God in the process of 'creation', for instance, and in the translation of things from the potential state to the actual, limited the expression of the command 'Be!' in the Koranic verse quoted above, since the thing itself possessed an inner faculty of realisation in the phenomenal world, so that it owed its realisation only to itself and not to God; it existed of itself. God, he wrote, only clothed a thing in the garb of being in accordance with what it was in itself and its essence (*'ayn*).[72] The being that God allotted to things, was one and only, undifferentiable, but they received it as individual recipients by different means and concretised it in different forms, each in accordance with its own specific nature and its own inner determination. From that it followed, Ibn Taymiyya said indignantly, that there was no Creator of the world except the World itself, and that God only had the power to create what was and could not augment the world or reduce it even by one speck, could not augment rain even by one drop, or reduce it, or change any of his properties or states of motion or rest, or shift stones from their place, or turn rivers backwards, or turn the misguided from their path, or make the follower of the true path lose his way, or rouse the rester or stop the mover; in short God did not have the power to make anything except what was.[73]

From these determinist positions Ibn 'Arabi proceeded to tackle the modality of being. In his doctrine the existent is dual depending on how far a thing's essence governed its existence. It was either necessary in itself, necessary existent, or existently necessary that whose nature in itself required existence, i.e. the Absolute, or possible existent, i.e. that whose nature required neither existence nor non-existence. In the phenomenal world everything existent, all concrete single things were possible since they did not in themselves contain the principle of their existence. But they were only accidentally possible, because necessary through another, the Absolute; and in that sense everything existent was necessary. Substantional possibility characterised only noumenal entities whose possibility (*imkan*) did not cease for an instant; they remained intelligible in themselves and did not have sensual, concrete being.[74]

In both cases, however, understanding of possibility was resolutely rejected in the sense that a thing could be this or that, could or could not possess this quality or that. Such an understanding of possibility removed the presence of God's freedom or choice (*ikhtiyar*). As Jili testified, Ibn 'Arabi claimed that God could not be aid to have choice (*mukhtar*) because He did not act from choice but in accordance with the inner requirements of the world itself.[75] In that he diverged from the Koranic tradition which ascribed absolute freedom of choice to God.[76] By recognising will (*irada, mashi'a*) in God, Ibn 'Arabi subordinated it to divine knowledge, which was governed in turn, as noted above, by things themselves; God could command only that which was in itself, since will was not divorced from knowledge, and knowledge from the cognised which was that which appeared and occurred. As for the Koranic verses such as

> For God is He that heareth
> And seeth (all things)[77]

it was a matter in them, he stressed, not of freedom of divine action but of a purely hypothetical, imaginary possibility that was not and could not be realised.[78]

Apart from the ideas of theistic voluntarism that underlay statements about the contingency of the world and the things contained in it, Ibn 'Arabi pointed out another grand for such statements, viz., examination of a concrete thing in isolation from its cause, or reason.[79] If a single thing was taken by itself, without causal connections with all other things, its existence could be shown to be contingent. But, said Amuli, developing this thought, if all things were taken together, as a single whole, then it would be discovered that each of them was necessary.[80] Our world was the best of all possible worlds and was therefore in fact not contingent but necessary. If it was even supposed that God had the power to create other worlds apart from ours, it would be absolutely identical with it because it was impossible for God to be capable of adding anything to this world. Assumption of the opposite would be denial not only of God's bountifulness (He grudged to give something), but also of his omnipotence (what He could not do at one time he could do at another), which had to be regarded as an absurdity.[81]

The determinism stemming from the nature of noumenal essences left no place either for any theistic interference in the world and the processes occurring in it or for any miracles on the part of people, including saints and apostles. Ibn 'Arabi, true, formally recognised the existence in the latter of a special supernatural fculty, *himma*, that enabled them to perform miracles. But, he affirmed, knowledge left no room for the effect of *himma*; the more knowledge an apostle had, the less he employed this faculty. Independently of whether the apostle had this faculty or not the result would be the same, because the events realised could not be divorced from what was determined by noumenal essences. In support of his ideas he cited a fact associated with the sending down of the Koranic verse in which God addressed the following words to the Prophet Mohammed:[82]

> It is true thou wilt not
> Be able to guide every one,
> Whom thou lovest.

How could *himma* exert any influence, he asked, if even the Prophet of Islam, who undoubtedly possessed the strongest *himma*, had been unable to attract his uncle Abu Talib to Islam (to which that verse referred)?

In developing the conception of noumenal essences Ibn ‘Arabi tackled one of the most important questions of Moslem religious philosophical thought, that of the character of the divine pre-established (*qada*’) and predestined (*qadar*), and the relation between them. He understood pre-establishment or preordainment as God’s decision about things in accordance with His knowledge of them, i.e. about the nature of their noumenal essences, and predestination as *tawqit*, the fixing of time (*waqt*), which meant, in the Sufist understanding, not only the time of a thing’s appearance in the phenomenal world but also all sensual concretisations of it at a given time.

At first glance Ibn ‘Arabi still followed in these definitions the traditional treatment of predestination adopted in religious-philosophical thought as the development in space and time of what was included in pre-establishment, viz. God’s pre-eternal decision. But in developing them he strongly diverged from this tradition, which subordinated predestination to pre-establishment. In his doctrine the ontological order of the two categories was quite the opposite: predestination preceded pre-establishment and determined it. The point was that, according to him, a thing, its noumenal essence included all its phenomenal determinations, so that *waqta* belonged to the thing itself and constituted a part of it, as it were. In that sense it could be said that predestination was noumenal essence in that state of the thing when all the preparations had been completed for realising it in the form of a concrete existent. God’s decision about the thing was taken on the basis of His knowledge, which in turn was entirely and wholly determined by the substantional structure of the object of knowledge, i.e. the noumenal essence of this thing. Knowing that there was a certain essence in a state of full readiness for phenomenal manifestation, and basing himself on that knowledge, God decided that the thing would be realised in the form of a definite, concrete thing. From that it followed, Ibn ‘Arabi concluded, that pre-establishment was subordinated to predestination.[83]

Pre-establishment, not to speak of predestination, was not imposed on a thing from outside but was formed with its inner nature. For God gave a thing only that which its essence gave God as knowledge of it, and this was what belonged to the thing in its noumenal being (*thubut*).[84] All the events and processes occurring in the world were strictly predestined, determined. But that determination, as we see, was very far from theistic fatalism which deduced predestination from the will of the omnipotent divinity. Determinism in Ibn 'Arabi's doctrine stemmed from the essence of things, from their noumenal being. Every thing, in its noumenal being was such as it would be in its phenomenal being.[85] And in that, according to him, lay the secret of predestination (*sirr al-qadar*), which is usually compared with Leibniz' pre-established harmony.

Proceeding from that understanding of pre-establishment and predestination, Ibn 'Arabi resolved the philosophical problem of freedom and necessity, which took the form in theology of questions of the relation of free will and predestination, but in Sufist literature was often developed in terms of freedom and slavery. Every thing in the world was necessary, determined, and predestined; therefore there was no place objectively for freedom as a possibility of unambiguous, alternative choice. Freedom could only be spoken of in the sense of the absence of external compulsion. Such freedom was attained in gnosis. When the secret of predestination was revealed to the gnostic or perfect man, he saw that he acted not through some compulsion but in full accordance with his own nature, with his noumenal essence. By adopting the position of its essence, a possible thing became free.[86] It was in gnosis that a person realised his substantional unity with the One, entered the rhythm of the Universe, and became aware of the harmony of his actions with the world process (or, as Ibn 'Arabi put it, God formed his tongue, eye, hearing, and all other organs), and so acquired freedom.

Any duality, including the opposition of the free and unfree disappeared on the background of the Whole, so that true freedom was in fact full slavery. In that context slavery meant dependence on external factors. It had various gradations, and its degree was inversely proportional to the level of development of the corresponding genus of creatures. Maximum slavery characterised inorganic objects, a lesser degree—plants, and even less—

animals. In man slavery was minimal. In gnosis, the state of unity with the Absolute, man became a particle of the world whole, and acquired full freedom, because all other objects were no longer foreign and external to him. But this supreme freedom and independence from anything partial, i.e. from everything that was not God, was full dependence on everything, because man, in the state of true freedom, and of unity with the Absolute, of dissolution of his will in the divine, became a simple particle of the world flux, being converted as it were into an inanimate object, the embodiment of complete slavery.[87] As we see, there was no place in Ibn 'Arabi's doctrine for a metaphysical (undialectical) opposing of freedom and necessity.

Rigorous determinism and denial of the possibility of free choice faced Ibn 'Arabi with the problem of man's responsibility for his deeds. He substantiated this responsibility by citing the fact that the actions performed by man were not dictated to him from outside but were inherent in his very nature, in his noumenal essence. The pinnacle of good and evil and the appropriate reward and punishment in the afterlife, bliss in paradise or torment in hell, was the inner determinations of man himself and his modes of self-realisation. No one but himself drove him to good; no one but himself caused him bliss or torment, so let him thank only himself for that and not God, and let him blame only himself and not God.[88] But this responsibility was rather to God and not to people. In everything that pertained to matters of faith and unbelief, observance or non-observance of religious law, Ibn 'Arabi called for religious tolerance, which at times passed into religious indifference.

All events in the world, including human actions, accorded in one way or another with divine requirements. But two kinds of these requirements had to be differentiated: ontological dictates (*amr takwin*) or mediated dictates (*amr bi-l-was ita*), i.e. transmitted by a prophet, which people might or might not obey. A person who did not obey a religious dictate, for example, to believe in God, in fact obeyed the ontological dictate that predetermined him to be an unbeliever. Rebelliousness in one respect was consequently obedience and submission in the other. Thus, for example,[89] the Pharaoh who, according to

Koranic tradition, refused to follow Moses, and even declared himself God, nevertheless did not deserve harsh condemnation because he had in fact only done what he did in accordance with God's ontological dictate.[90] The theme of acquittal of the devil common in Sufism got its philosophical basis in such arguments.

By citing Koranic verses[91] such as

54. ...Your Lord hath inscribed
For Himself (the rule
Of) Mercy
156. My Mercy extendeth
To all things
53. Say: 'O my Servants who
Have transgressed against their souls!
Despair not of the Mercy
Of God: for God forgives
All sins'.

and hadiths (in particular that which said God's mercy surpassed His anger), Ibn 'Arabi stressed the universality of divine mercy, which he interpreted in a sense close to all-forgiveness.[92] All people, irrespective of their religious affiliation, were ultimately saved, thanks to God's mercy. Even the most irreconcilable sinners, who did not repent, would be only temporarily condemned to punishment, and would later be sent to paradise. Ibn 'Arabi went even further, depriving heaven and hell of their religious, eschatological sensuous meaning. They were only symbols, in his opinion, that indicated the state of closeness to or remoteness from the Beloved, attainment or ignorance of the Truth, i.e. awareness or unawareness of substantional unity with the Absolute.[93]

Ibn 'Arabi invoked God's mercy, criticising the practice of employing religion to sanction and hallow coercion and violence against people. He considered that religious aims could not be a justification of the victimisation of people. It was better, he argued, to care for leniency toward God's slaves than to strive in zealous service to God. When David, for example, wanted to build a holy temple in Jerusalem, he reconstructed it several times. And each time the temple collapsed when the building of it was completed. Then David complained of this to God, and God said to him that His temple could not be erected by a man who shed blood. David said that surely that had been done in the Lord's name, and God replied but surely they had been His slaves.[94] A person should resemble God in his merciful attitude to all things created and do good to all people, unbelievers and believers, sinful and devout.[95]

Ibn 'Arabi proclaimed the actual equality of all religions and creeds in a spirit of maximum tolerance and an orientation to overcoming any confessional and religious alienation between people. The gods of creeds (*ilah al-mutakadat*), i.e. people's objects of worship in various religions, were different phenomenal manifestations of the one noumenal essence, the absolute God (*ilah mutlaq*). A true gnostic did not limit himself to one creed, rejecting others, but saw God in every divinity, and reduced differences in religions to differences in theophany. The gnostic knew that God manifested himself in different forms, like a chameleon that changed its colour according to the place where it was, or like water, which took on the colour of the vessel.[96]

The appeal of Ibn 'Arabi and his followers to the Koran in support of their religious universalism was very bold, and from the standpoint of dogmatic theologians extremely seditious. Thus they interpreted the *qada'* (decreed) in the sense of pre-established in the following verse of the Koran, which was usually interpreted by Moslem theologians in the sense of an appeal or call:[97]

23. Thy Lord hath decreed (*qada*)
That ye worship none but Him.

In that understanding this verse indicated the identity of all divinities with God.[98] People worshipped some stone, or tree, or animal, man, star, or angel, but in fact—and this had been predetermined by Allah himself—they worshipped God who manifested himself in these partial divinities. The Wujudites also reinterpreted the words of God in the following verses in the same spirit:[99]

25. ...there is
No God but I.
115. ...whithersoever
Ye turn, there is the Presence
of God.

They also reinterpreted the formula that is the symbol of the faith of the Moslem religion—'There is No God but Allah'.

In consistently asserting religious pluralism, Ibn 'Arabi not only taught the legitimacy of all existing religions and creeds but also substantiated the right of every one to an exclusively individual belief. Following his predecessors among Sufist thinkers he said that the ways to God were as many as the souls of men, so that each had the right to follow his own path to the Truth.[101] These paths were various—one was long, another short—but all were in fact straight, and identical with the path about which it spoke in the Koran:[102]

87. ...And We guided them.
To a straight Way.

The gnostic differed from ordinary people in that he saw straightness in a curve. For the 'straightness' of an equilateral triangle was that it had three equal angles, the straightness of an isosceles triangle that it had two identical sides; the straightness of a bow lay in its curvature, which corresponded to its purpose; the straightness of a plant lay in its vertical movement, that of animals in their horizontal movement, and so on.[103] Everything in the Universe thus followed the straight way predetermined by God. In that sense all creeds were true. Ibn 'Arabi described in poetical form his own overcoming of the state of religious alienation, in which one condemned a comrade if his religion was not close to one's own, and began to preach a religion of universal love that encompassed all religions.

My heart has become of every form,
A cloister for the monk, a fane for idols,
A pasture for gazelles, the pilgrim's Kaaba,
The Tables of the Torah, the Koran.
Love is the faith I hold: wherever turn
His camels still the one true faith is mine.[104]

His religious universalism is also clearly expressed in the following lines:

Peoples have different beliefs about God
But I behold all that they believe.[105]

The ideals of religious tolerance and universalism, which had a firm philosophical foundation in Wujudism are characteristic features of the world outlook of most spokesmen of Sufism and largely explain its wide spread in the spiritual life of classical Islam.

[1] Usually without the article *al'* in order to distinguish him from his compatriot, the theologist Abu Bakr ibn al-Arabi (d. 1148).

[2] Apart from the two main works of Ibn 'Arabi mentioned, the following short treatises devoted to matters of ontology and cosmology deserve mention from a purely philosophical standpoint: *The Tree of Being (Sharajat al-kawn), The Construction of Circles (Inshah ad-dawa'ir), A Bridle for the Intolerant (Uqlat al-mustawfiz), Divine Constructions (At-Tadbirat al-ilahiyya).*

[3] Ibn 'Arabi was also known by the sobriquet *Muhiyddin*, 'the vivifier of religion'. Opponents of Sufist pantheism and religious universalism altered it to *Mahiddin*, 'he who abolishes religion', and *Mumituddin*, 'the murderer of religion'.

[4] See: Ibn 'Arabi. *Al-Futuhat al-makkiyya* (Dar al-kutub al-'arabiyya al-kubra, Cairo, 1911), Vol. I, p 38.

[5] See: Ibn 'Arabi. *Fusus al-hikam* (Dar al-kitab al-'arabi, Beirut), p 111; Idem. *Al-Futhat*, Vol. II, pp 67, 283; Vol. III, p 420.

[6] *Hegel's Philosophy of Mind.* Translated by W. Wallace. (Clarendon Press, Oxford, 1894), pp 309, 310.

[7] See: Ibn 'Arabi. *Al-Futuhat*, Vol. IV, p 100.

[8] See: Ibn 'Arabi. Kitab al-alif. In: *Rasa' il Ibn 'Arabi* (Matba'at jam'iyyat da'irat al-ma'arif, Hyderabad, 1948), pp 2-4.

[9] See: Al-Amili. *Kitab jami' al-asrar* (Teheran, 1969), p 195; Al-Qashani. *Istilihat as-sufiyya* (Al-Hay'a al-misriyya al-'amma li-l-kitab, Cairo, 1981), p 101.

[10] See: Ibn 'Arabi. *Fusus al-hikam*, p 153.

[11] See: Shabistari. *Gulshan-i raz* (Trübner & Co., London, 1880).

[12] See: Ibn 'Arabi. *Fusus al-hikam*, p 79.

[13] *Ibid.*, pp 83, 111-112, 190; idem. *At-Futuhat*, I, p 339, III, pp 115, 494, IV, pp 125, 167.

[14] Ibidem. *Al-Futuhat*, I, p 363; Al-Amuli. *Op. cit.*, pp 65, 69.

[15] See: Ibn Taymiyya. *Majmu'at*, Vol. I, p 183, Vol. IV, p 82.

[16] Ibn 'Arabi. *Al-Futuhat*, II, p 417; IV, p 107.

[17] *Ibid.*, II, pp 31, 281; IV, p 184.

[18] See: Ibn Taymiyya. *Majmu'at*, IV, pp 44, 27.

[19] *Ibid.*, I, p 186.

[20] See: Ibn 'Arabi. *Al-Futuhat*, III, p 419.

[21] *Ibid.*, IV, p 100.

[22] Ibid., II, p 604; See also; Al-Jili. *Al-Insan al-kamil* (Maktabat Subayh, Cairo, 1963), I, p 28.

[23] See: Ibn 'Arabi. *Fusus al-hikam*, pp 65, 76; idem. *Al-Futuhat*, IV, p 294.

[24] Idem. *Fusus al-hikam*, pp 51-52; Al-Jili. *Op. cit.*, I, pp 44 ff.

[25] See: Ibn 'Arabi. *Al-Futuhat*, III, p 405.

[26] Idem. *Fusus al-hikam*, pp 70, 78, 93, 182.

[27] *Ibid.*, p 77.

[28] See: Al-Jili. *Op. cit.*, Vol. I, pp 7, 15.

[29] See: Ibn 'Arabi. *Al-Fuuhat*, II, pp 326, 542; III, p 449; idem. *Fusus al-hikam*, p 217.

[30] Idem. *Al-Futuhat*, II, pp 327 ff; idem. *Fusus al-hikam*, pp 215 ff.

[31] The expression 'new creation' is itself taken from the Koran (verses 35: 16; 17 : 49; 50 : 15):

16. If He so pleased, He
Could blot you out
And bring in
A new Creation.
49. They say: 'What!
When we are reduced
To bones and dust
Should we really be raised up
(To be) a new creation?'
15. Were We then weary
With the first reaction,
That they should be
In confused doubt
About a new Creation.

In the Koranic usage, however, it means only creation anew with resurrection in the after-life.

[32] See: Ibn 'Arabi. *Insha' ad-dawa'ir*, in: *Kleinere Schriften des Ibn al-'Arabi* (Brill, Leiden, 1919), p 16.

[33] This will be developed in more detail below in the point devoted to 'noumenal essences'.

[34] *The Holy Qur-an*, 55 : 29.

[35] See: Ibn 'Arabi. *Al-Futuhat* III, pp 198-199; I, p 292.

[36] *Ibid.*, III, pp 303-304.

[37] Idem. *Fusus al-hikam*, pp 155-156; See also; idem. *Al-Futuhat*, I, p 292; III, p 275.

[38] *Ibid.*, pp 73, 124.

[39] See: Ibn 'Arabi. *Al-Futuhat*, I, p 125; idem. *'Uglat al-mustawfiz*, in *Kleinere Schriften*, p 93.

[40] *The Holy Qur-an*, S. 28 : 88.

[41] See: Ibn 'Arabi. *Al-Futuhat*, III, p. 420; see also: Al-Qashani. *Sharh Fusus al-hikam* (Matba'at al-Halabi, Cairo, 1966), p 111.

[42] *Ibid.*, I, p 338, II, p 281.

[43] *The Holy Qur-an*, S. 21; 30.

[44] See: Ibn 'Arabi. *Fusus al-hikam*, p 196. See also: Al-Qashani. *Istilahat as-sufiyya*, pp 32, 135, 148.

[45] See: Al-Qunawi. *I'jaz al-bayan* (Da' irat al-ma'arif, Hyderabad, 1949), pp 3-4, 99, 379, 510-511.

[46] Idem. *Al-Fukuk*. On the margin of al-Qashani's *Sharh manazil as-sa'irin* (Teheran, 1315, A.H.), pp 204, 266-267.

[47] Al-Qashani. *Sharh fusus al-hikam*, p 132; idem. *Istilahat as-sufiya*, pp 77, 82; Al-Amuli. *Op. cit.*, pp 559-560.

[48] See: Al-Hakim, Su'ad. *Al Mu'jam as-sufi* (Dandara, Beirut, 1981), p 158.

[49] See: Ibn 'Arabi. *Insha' ad-dawa'ir*, pp. 15-19; idem. *Al-Futuhat*, I, pp 118-119.

[50] In a later work of Ibn 'Arabi's *Al-Futuhat al-Maqqiya*, Vol. III, p 404 the list of categories was reduced to four: substance, accidence, space, and time, to which the rest (quantity, quality, possession, action, and affection) were reduced.

[51] See: Ibn 'Arabi. *Insha' ad-dawa'ir*, p 26.

[52] Idem. *Al-Futuhat*, III, p 430.

[53] *Ibid.*, II, pp 67, 124, 150.

[54] Idem., *Fusus al'hikam*, pp 48-49.

[55] Idem. *Al-Futuhat*, IV, pp 61, 167.

[56] See: Al-Qaysari. *Kitab fi 'ilm at-tasawwuf*. In: *Nusus falsafiyya muhdat ila ad-ductur Ibrahim Madkur* (Al-Hay'na al-misriyya al-'amma li-l-kitab, Cairo, 1976), p 248.

[57] See: Al-Qashani. *Istilahat as-sufiyya*, p 98.

[58] See: Al-Qaysari. *Op. cit.*, p 267.

[59] See: Ibn 'Arabi. *Fusus al-hikam*, p 163.

[60] *Ibid.*, p 62.

[61] *Ibid.*, pp 156, 164, 206; idem. *Shaqq al-juyub* (Matba'at as-sa'ada, Cairo, 1325 A.H.), p 28.

[62] Ibn Taymiyya. *Majmu'at*, IV, p 8.

[63] See: Ibn 'Arabi. *Al-Futuhat*. II, p 232; IV. pp 269-270.

[64] *Ibid.*, II, p 402.

[65] See: Al-Jili, *Op. cit.*, I, p 49.

[66] *The Holy Qur-an*, s. 19 : 9.

[67] See: Ibn 'Arabi. *Al-Futuhat*, II, p 56; IV, p 167.

[68] *The Holy Qur-an*, s. 36 : 82.

[69] See: for example: Ibn Taymiyya. *Majmu't*. IV, p 9.

[70] See: Ibn 'Arabi. *Fusus al-hikam*, pp 82, 83.

[71] Ibn Taymiyya. *Majmu'at*, IV, p 59.

[72] See: Ibn 'Arabi. *Al-Futuhat*, IV, p 86; see also: idem. *Fusus al-hikam*, pp 115-116.

[73] Ibn Taymiyya. *Op. cit.*, p 59.

[74] Ibn 'Arabi. *Fusus al-hikam*, p 67; idem. *Insha' ad-dawa'-ir*, p 10.

[75] See: Al-Jili. *Op. cit.*, I, p 49; compare: Ibn 'Arabi. *Insha' ad-dawa'ir*, pp 10-11; idem. *Al-Futuhat*, III, pp 356, 375.

[76] See, for example, *The Holy Qur-an*, s. 28 : 68 'Thy Lord does create and choose As He pleases.'

[77] *The Holy Qur-an*, S. 4 : 134.

[78] See: Ibn 'Arabi. *Al-Futuhat*, IV, p 240; idem. *Fusus al-hikam*, pp 82-83.

[79] Ibn 'Arabi. *Al-Futuhat*, I, p 198.

[80] See: Al-Amuli. *Op. cit.*, p 674.

[81] See: Ibn 'Arabi. *Insha' ad dawa'ir*, pp 26-27, 38.

[82] *The Holy Qur-an*, s. 28 : 56.

[83] See: Ibn 'Arabi. *Fusus al-hikam*, p 130.

[84] *Ibid.*, p 132.

[85] *Ibid.*, p 60.

[86] *Ibid.*, p 83.

[87] Ibn 'Arabi. *Al-Futuhat*, II, p 227.

[88] Idem. *Fusus al-hikam*, p 96.

[89] See: *The Holy Qur-an*, s. 43 : 46, 79 : 15-24.

See: Ibn 'Arabi. *Fusus al-hikam*, pp 165, 208-212.

[91] See: *The Holy Qur-an*, DD 6 : 54, 7 : 156; 39 : 53.

[92] See: Ibn 'Arabi. *Fusus al-hikam*, p 141; idem. *Al-Futuhat al-makkiyya*, II, pp 362-363.

[93] Idem. *Fusus al-hikam*, pp 93-94; idem. *Al-Futuhat*, III, p 387.

[94] Idem. *Fusus al-hikam*, p 167.

[95] Idem. *Al-Futuhat*, II, pp 362-363.

[96] *Ibid.*, I, p 266; IV, p 186; idem. *Fusus al-Hikam*, pp 73, 113, 178, 226.

[97] *The Holy Qur-an*, s. 17 : 23.

[98] See: Ibn 'Arabi. *Fusus al-hikam*, p 192; *Al-Futuhat*, IV, p 158.

[99] *The Holy Qur-an*, ss. 21 : 25; 2 : 115.

[100] See: Ibn 'Arabi. *Fusus al-hikam*, p 113; idem. *Al-Futuhat*, IV, p 89; Al-Jili. *Op. cit.*, II, p. 87.

[101] See: Ibn 'Arabi. *Al-Futuhat*, III, pp 410-411.

[102] *The Holy Qur-an*, s. 6 : 87.

[103] *Ibid.*, II, pp 217-218; III, p 65; idem. *Fusus al-hikam*, p 114.

[104] Idem. *The Tarjuman al-ashwaq*. Translated by S.A. Nicholson (Royal Asiatic Society, London, 1911), p 19.

[105] Idem. *Al-Futuhat*, III, p 175.

Epilogue

In addition to the thinkers considered above, the greats of classical Islamic philosophy undoubtedly include the North African historian Ibn Khaldun (1331-1406), creator of a doctrine of the human community (*umran*), in which he posed the task of converting history from the history of kings and prophets into a rigorous scientific discipline, that was to form one of the most important branches of philosophy. But his work belongs to the field of social philosophy which we have specially agreed not to examine.

Ibn Khaldun's theory did not find continuers in the Moslem world and remained a unique phenomenon in it. On the contrary, many of the doctrines discussed in this book found development in the works of later Moslem authors. The influence of the ideas of Ibn Sina, Ibn Arabi, Suhrawardi, Ghazali (thinkers who incorporated the principles of *falsafa* and *kalam* in their views) on the intellectual life of the Moslem world is traceable to one extent or another right down to the twentieth century.

Classical Islamic philosophy had a considerable influence on the development of the philosophical thought of Europe. In the twelfth century in Toledo, on the initiative of the local archbishop, the great chancellor of Castille, Raimundo Lulio, a school of translators was founded that did much to acquaint the Christian world with the antique and Moslem philosophical legacy preserved in Arabic. Two other centres of translation of philosophical and scientific literature from Arabic into Latin were Burgos and Sicily.

Several features can be noted in the work of these translation centres, reminiscent of the translation movement in the Baghdad caliphate. In both, intermediaries were often involved in translation, in Toledo Jewish scholars and in the East Syrian Nestorians. And in both areas there was a selective approach to the spiritual legacy of predecessors, rejecting everything foreign and specific, and preserving the universal and human. Of the three main trends of Islamic philosophy Sufism had the greatest significance for the development of European philosophical thought. Its relation to western non-Islamic literature can be seen more on the plane of typological similarity than from the angle of influence and borrowings.

From the science of *kalam* atomistic ideas attracted the closest attention of Christian Europe; although some thinkers (Thomas Aquinas, for example) rejected them, they encouraged a rebirth of Europeans' interest on the whole in atomistics. The *mutakallims* developed several ideas that Greek scholars had only approached and which had not been formulated and clearly expressed by them. These included the differentiation of 'extension' in general and 'corporeality', 'position', and 'place', physical and mathematical divisibility, physical and mathematical minima (atom and point). These ideas, precisely of the *mutakallims*, were apparently directly or indirectly absorbed by the natural philosophers of the Renaissance. The Greek conception of 'pause', which explained the difference in the velocities of moving bodies by a greater or lesser number of 'stops', also passed to the atomists of modern times via the science of *kalam*. It was not by chance that certain European finitists numbered *mutakallims* first in the list of their teachers and predecessors.

Falsafa in the persons of the Islamic Aristotelians had the greatest influence on the thought of Europe. As Roger Bacon (d. 1294) had remarked, it was thanks to Moslem commentators that Aristotle's philosophy, previously lost in oblivion, became known in Latin. Original works of the *falasifa* left a profound mark on the philosophy of the European Middle Ages and Renaissance. The mediaeval European bookmen were familiar with the works of Kindi and Farabi, and Ghazali's *Maqasid al-falasifa* (he was seen as one of the main representatives of the Aristotelian philosophy due to his short exposition of it). The philosophical works of Ibn Tufayl enjoyed wide popularity among European scholars, especially after their Latin translation of 1671. But the deepest mark on Christian Europe was left by Ibn Sina (Avicenna) and Ibn Rushd (Averroes). Ibn Sina's philosophy attracted attention primarily through its Neoplatonic aspects. As a result there arose a current sometimes called 'Avicennising Augustinism'. In the thirteenth century Avicenna's influence is traceable in William of Auvergne, in the French *maîtres* of Paris University, in Alexander Halensis, Jean de La Rochelle, and Bonaventura (Giovanni Fidanza), and also in the English Franciscans Robert Grosseteste and John Peckham. This influence reached its apogee in the philosophy of Roger Bacon, whose political ideas, in particular, reflected the views of Ibn Sina on the Caliphate. Traces of Avicenna's influence can also be found in the work of Albertus Magnus, Thomas Aquinas, and Duns Scotus.

The philosophy of Ibn Rushd (Averroes) was popular in Europe in the thirteenth to sixteenth centuries and underlay Averroism, the trend in mediaeval West European philosophy called after him. His main followers in Paris University in the thirteenth century were Siger de Brabant and Boethius of Dacia, and in the fourteenth century Jean Jeandin. In the fourteenth to sixteenth centuries the centres of Averroism were Bologna and Padua Universities (Pietro d'Abano, Paolo Veneto, Gaetano da Tiene). Ideas that arose in Ibn Rushd are traceable in the work of Pietro Pomponazzi, Porzio, Cremonini, Pico della Mirandola, Giordano Bruno, and Vanini. Averroists developed the doctrine of their teacher about the birth of forms in the womb of matter. Asserting the universal causal link of phenomena (following Ibn Rushd), they saw in the regular motion of the heavenly bodies a manifestation of the natural necessity that governed everything happening in the sublunary world including the changing of states and religious laws. Averroists rejected individual immortality, holding a conception of a single intellect common to mankind. When substantiating the autonomy of human reason and the independence of philosophical knowledge from theology, Ibn Rushd's European followers developed a doctrine of double truth, according to which tenets untrue from the standpoint of theology could be true from the standpoint of philosophy. The conception of the immortal human intellect put forward by him was associated in

Europe for centuries, and not only, moreover, by Averroists (Dante, Herder), with the idea of a single humanity that was progressing in its intellectual and moral development.

Classical Islamic philosophy on the whole promoted secularisation of Europe's philosophical thought, strengthened its ties with the natural sciences, and so prepared the shaping and development of the philosophy of modern times.

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